

# Chapter 1: A World of Regions

## The Power of Geography

### Some Fundamental Concepts

- Location
- Understanding Maps
  - Map Scales*
  - Map Projections*
- Interdependence

### A World of Regions

- The Regional Approach
  - Regionalization*
  - Landscape*
  - Sense of Place*
- Scale
  - World Regions*
  - National States*
  - Community, Home, and Body*
- Boundaries and Frontiers
  - Frontier Regions*
  - Boundary Formation*
- Regionalism and Sectionalism

### Places and Regions in a Changing World

- The Interdependence of Regions
- Globalization
- Nature-Society Interactions
  - Geography Matters: Globalization and Interdependence*
- The Fast World and the Slow World
  - Geography Matters: The Digital Divide*
  - Globalization and Cultural Change*
  - The Increasing Significance of Places and Regions*
  - Geography Matters: Mobilization Against Globalization*

### The Global Context: Some Important Patterns

- Religion
- Language
- Population
- Urbanization
- Economic Development and Social Well-being
  - Resources and Technology*
  - Measuring Economic Development*
  - Patterns of Social Well-Being*
  - Development and Gender Equality*

**Conclusion: A World of Regions**

**Key terms**

**Exercises**

**Further Reading**

**Movies, Books, and Music**

One commonly held belief about today's information age is that instantaneous global telecommunications, satellite television, and the Internet will soon overthrow all but the last vestiges of geographical differentiation in human affairs. Companies, according to this view, will need no headquarters—they will be able to locate their activities almost anywhere in the world. Employees will work as effectively from home, car, or beach as they could in the offices that need no longer exist. Events halfway across the world will be seen, heard, and felt with the same immediacy as events across town. National differences and regional cultures will dissolve, as a global marketplace brings a uniform dispersion of people, tastes, and ideas.

Such developments are in fact highly unlikely. Even in the information age, geography will still matter and may well become more important than ever. Places and regions will undoubtedly change as a result of the new global context of the information age. But geography will still matter because of transport costs, differences in resource endowments and access to capital, fundamental principles of spatial organization, people's territorial impulses, the resilience of local cultures, and the legacy of the past.

Today, major world regions (**Figure 1.1**) are increasingly dependent on one another, and it is important to know something about regional geography and to understand how places and regions affect, and are affected by, one another. Consider, for example, some of the prominent news stories of 2000. At first glance, they were a mixture of achievements, disputes, and disasters that might seem to have little to do with geography, apart from the international flavor of the coverage. There was civil war in Sierra Leone, ethnic strife in Indonesia, Sri Lanka, Sudan and Zimbabwe, and simmering conflict between India and Pakistan; but peace talks progressed in Ireland, the Middle East, and Korea. In Europe, there were mass rallies against genetically-modified foods and demonstrations against international fast-food franchises; in the United States, there were protests against the policies of the International Monetary Fund and the World Bank. Off the front pages, we read of international agreements designed to combat global warming, of the impact of globalization on local cultures and local economic development prospects, and of the continuing struggle to control AIDS.

### **Fig 1.1 map of world regions**

Most of these stories did, in fact, reflect important geographical dimensions. The diffusion of AIDS, for example, is a geographical as well as a social and cultural phenomenon. Thus, in the United States as in other countries, the AIDS epidemic has diffused through the country in a very distinctive geographical pattern. Behind some of the major news stories, geographical processes played a more central role. Stories about local economic development, local territorial disputes, the globalization of the economy,

and global warming, for example, all involve a strong geographical element.

Regional geography is about understanding the variety and distinctiveness of places and regions, without losing sight of the interdependence among them. Geographers learn about the world by finding out where things are and why they are there, and by analyzing the spatial patterns and distributions that underpin regional differentiation and regional change. In this chapter we introduce the basic tools and fundamental concepts that enable geographers to study the world in this way.

## THE POWER OF GEOGRAPHY

As a subject of scientific observation and study, geography has made important contributions both to the understanding of the world and to its development. As we move farther into the information age, geography continues to contribute to the understanding of a world that is more complex and fast-changing than ever before. With a good understanding of world regional geography, it is possible not only to appreciate the diversity and variety of the world's peoples and places but also to be aware of their relationships to one another and to be able to make positive contributions to regional, national, and global development.

The study of geography involves the study of Earth as created by natural forces and as modified by human action. This, of course, covers an enormous amount of subject-matter. *Physical geography* deals with Earth's natural processes and their outcomes. It is concerned, for example, with climate, weather patterns, landforms, soil formation, and plant and animal ecology. *Human geography* deals with the spatial organization of human activity and with people's relationships with their environments. This focus necessarily involves looking at natural, physical environments insofar as they influence, and are influenced by, human activity. This means that the study of human geography must cover a wide variety of phenomena. These phenomena include, for example, agricultural production and food security, population change, the ecology of human diseases, resource management, environmental pollution, regional planning, and the symbolism of places and landscapes.

**Regional geography**, which combines elements of both physical and human geography, is concerned with the way that unique combinations of environmental and human factors produce territories

with distinctive landscapes and cultural attributes. The concept of **region** is used by geographers to apply to large-sized territories (such as counties, provinces, national states, or large sections of a national state, such as the U.S. Midwest) that encompass many **places**, all or most of which share a set of attributes that differ from the attributes of places that make up a different region. What is distinctive about the study of regional geography is not so much the phenomena that are studied as the *way they are approached*. The contribution of regional geography is to reveal how natural, social, economic, political, and cultural phenomena come together to produce distinctive geographic settings.

In the United States, a decade of debate about geography education has resulted in a widespread acceptance that being literate in geography is essential in equipping citizens to earn a decent living, to enjoy the richness of life, and to participate responsibly in local, national, and international affairs. In response to the inclusion of geography as a core subject in the *Goals 2000: Educate America Act* (Public Law 103-227), a major report on the goals of geographic education was produced jointly by the American Geographical Society, the Association of American Geographers, the National Council for Geographic Education, and the National Geographic Society.<sup>1</sup> Published in 1994, the report emphasized the importance of being geographically informed—that is, having an understanding that geography is the study of people, places, and environments from a spatial perspective and appreciating the interdependent worlds in which we live:

The power and beauty of geography allow us to see, understand, and appreciate the web of relationships between people, places, and environments.

At the everyday level, for example, a geographically informed person can appreciate the locational dynamics of street vendors and pedestrian traffic or fast-food outlets and automobile traffic; the routing strategies of school buses in urban areas and of backpackers in wilderness areas; the land-use strategies of farmers and of real estate developers.

At a more expanded spatial scale, that same person can appreciate the dynamic links between severe storms and property damage or between summer thunderstorms and flash floods; the

---

<sup>1</sup> Geography Education Standards Project, *Geography for Life. National Geography Standards 1994*. Washington, D.C., National Geographic Research and Exploration, 1994.

use of irrigation systems to compensate for lack of precipitation . . . ; the seasonal movement of migrant laborers in search of work and of vacationers in search of sunshine and warmth.

At a global level, the geographically informed person can appreciate the connections between cyclical drought and human starvation in the Sahel or between the Chernobyl nuclear disaster and the long-term consequences to human health and economic activities throughout eastern and northwestern Europe; the restructuring of human migration and trade patterns as the European Union becomes increasingly integrated or as the Pacific rim nations develop a commonality of economic and political interests; and the uncertainties associated with the possible effects of global warming on human society or the destruction of tropical rain forests on global climate.<sup>2</sup>

**The report cited four different reasons for being geographically informed:**

- **The Existential Reason.** In 1977, the U.S. spacecraft *Voyager 1* set out on its epic journey to the outer solar system and beyond. When it had passed the most distant planet, its camera was turned back to photograph the solar system. Purely by chance, the camera recorded a pale blue dot in the vastness of space. Every human who has ever lived has lived on that blue dot—Earth (**Figure 1.2**). Humans want to understand the intrinsic nature of their home. Geography enables them to understand where they are, literally and figuratively.

**Fig 1.2 Voyager photo of Earth**

- **The Ethical Reason.** Earth will continue to whirl through space for untold millennia, but it is not certain that it will exist in a condition in which humans can thrive or even live. . . . Geography provides knowledge of Earth's physical and human systems and of the interdependency of living things and physical environments. That knowledge, in turn, provides a basis for humans to cooperate in the best interests of our planet.
- **The Intellectual Reason.** Geography captures the imagination. It stimulates curiosity about the world and the world's diverse inhabitants and places, as well as about local, regional, and global issues. By understanding our place in the world, humans can overcome parochialism and ethnocentrism. Geography focuses attention on exciting and interesting things, on fascinating peoples and places, on things worth knowing because they are absorbing and because knowing them makes humans better-informed and, therefore, wiser decisions.

---

<sup>2</sup> Geography for Life, p. 29.

- *The Practical Reason.* Geography has utilitarian value in the modern world. As the interconnectedness of the world accelerates, the practical need for geographic knowledge becomes more critical. Imagine a doctor who treats diseases without understanding the environment in which the diseases thrive and spread, or a manufacturer who is ignorant of world markets and resources, or a postal worker who cannot distinguish Guinea from Guyana. With a strong grasp of geography, people are better equipped to solve issues not only at the local level but also at the global level.<sup>3</sup>

The importance of geography as a subject of study has become more widely recognized in recent years as people everywhere have struggled to understand a world that is increasingly characterized by instant global communications, unfamiliar international relationships, unexpected local changes, and growing evidence of environmental degradation. Many more schools now require courses in geography than just a decade ago, and the Educational Testing Service's College Board has added the subject to its Advanced Placement program. Between 1985-1986 and 1996-1997, the number of bachelor's degrees in geography increased from 3,056 To 4,128. Meanwhile, many employers have come to realize the value of employees with expertise in geographical analysis and an understanding of the uniqueness, influence, and interdependence of places.

## SOME FUNDAMENTAL CONCEPTS

The study of regional geography draws on several fundamental concepts. In analyzing the spatial patterns and distributions that underpin regional differentiation, it is important to understand the ways in which it is possible to approach the apparently straightforward issue of location. Second, it is important to have an understanding of one of geographers' basic tools: maps. Third, it is important to understand the idea of interdependence between places and regions.

### Location

Often, location is *nominal*, or expressed solely in terms of the names given to regions and places. We speak, for example, of Washington, DC, or of Georgetown, a location within Washington, DC. Location can also be used as an *absolute* concept, whereby locations are fixed mathematically through coordinates of latitude and longitude (**Figure**

---

<sup>3</sup> Geography for Life, pp. 23-24

**1.3). Latitude** refers to the angular distance of a point on Earth's surface, measured in degrees, minutes, and seconds north or south from the equator, which is assigned a value of 0°. Lines of latitude around the globe run parallel to the equator, which is why they are sometimes referred to as parallels. **Longitude** refers to the angular distance of a point on Earth's surface, measured in degrees, minutes, and seconds east or west from the prime meridian (the line that passes through both poles and through Greenwich, England, and which is assigned a value of 0°). Lines of longitude, called meridians, always run from the North Pole (latitude 90° north) to the South Pole (latitude 90° south). Georgetown's coordinates are 38° 55' N, 77° 00' E.

Thanks to the Global Positioning System (GPS), it is very easy to determine the latitude and longitude of any given point. The **Global Positioning System** consists of 21 satellites (plus 3 spares) that orbit Earth on precisely predictable paths, broadcasting highly accurate time and locational information. The GPS is owned by the U.S. government, but the information transmitted by the satellites is freely available to everyone around the world. All that is needed is a GPS receiver. Basic receivers cost less than \$100 and can relay latitude, longitude, and height to within 10 meters day or night, in all weather conditions, in any part of the world. The most precise GPS receivers, costing thousands of dollars, are accurate to within a centimeter. GPS has drastically increased the accuracy and efficiency of collecting spatial data. In combination with **geographic information systems** (GIS) and **remote sensing** (the collection of information about parts of Earth's surface by means of aerial photography or satellite imagery), GPS has revolutionized map-making and spatial analysis.

**Fig 1.3 diagram of latitude & longitude**

Location can also be *relative*, fixed in terms of site or situation. **Site** refers to the physical attributes of a location: its terrain, its soil, vegetation, and water sources, for example. **Situation** refers to the location of a place relative to other places and human activities: its accessibility to routeways, for example, or its nearness to population centers (**Figure 1.4**). Washington, DC, has a low-lying, riverbank site and is situated at the head of navigation of the Potomac River, on the eastern seaboard of the United States.

**Fig 1.4 : diagram illustrating situation**

Finally, location also has a *cognitive* dimension, in that people have cognitive images of places and regions, compiled from their own

knowledge, experience, and impressions. **Cognitive images** (sometimes referred to as mental maps) are psychological representations of locations that are made up from people's individual ideas and impressions of these locations. These representations can be based on people's direct experiences, on written or visual representations of actual locations, on hearsay, on people's imagination, or on a combination of these sources. Location in these cognitive images is fluid, depending on people's changing information and perceptions of the principal landmarks in their environment. Some things, indeed, may not be located in a person's cognitive image at all! **Figure 1.5** shows a caricature of a New Yorker's cognitive image of the United States.

**Fig 1.5 :** regional-scale cognitive map

### Understanding Maps

Maps are representations of the world, and the body of practical and theoretical knowledge about map-making is known as **cartography**. Maps are usually two-dimensional, graphic representations that use lines and symbols to convey information or ideas about spatial relationships. Maps that are designed to represent the *form* of Earth's surface and to show permanent (or, at least, long-standing) features such as buildings, highways, field boundaries, and political boundaries, are called *topographic maps* (see, for example, **Figure 1.6**). The usual device for representing the form of Earth's surface is the *contour*, a line that connects points of equal vertical distance above or below a zero data point, usually sea level.

**Figure 1.6** (extract from topo. map)

Maps that are designed to represent the spatial dimensions of particular conditions, processes, or events are called *thematic maps*. These can be based on any one of a number of devices that allow cartographers or map makers to portray spatial variations or spatial relationships. One of these is the *isoline*, a line (similar to a contour) that connects places of equal data value (for example, air pollution, as in **Figure 1.7**). Maps based on isolines are known as *isopleth maps*. Another common device used in thematic maps is the *proportional symbol*. Thus, for example, circles, squares, spheres, cubes, or some other shape can be drawn in proportion to the frequency of occurrence of some particular phenomenon or event at a given location. Symbols such as arrows or lines can also be drawn proportionally, in order to portray flows of things between particular places. **Figure 1.8** shows two examples of proportional symbols: flow lines and proportional circles. Simple distributions can be effectively portrayed through *dot maps*, in which a

single dot or other symbol represents a specified number of occurrences of some particular phenomenon or event (**Figure 1.9**). Yet another device is the *choropleth map*, in which tonal shadings are graduated to reflect area variations in numbers, frequencies, or densities (**Figure 1.10**). Finally, thematic maps can be based on *located charts*, in which graphs or charts are located by place or region. In this way, a tremendous amount of information can be conveyed in one single map (**Figure 1.11**).

Figures 1.7—1.11 (examples of thematic maps)

### Map Scales

A *map scale* is simply the ratio between linear distance on a map and linear distance on Earth's surface. It is usually expressed in terms of corresponding lengths, as in "one centimeter equals one kilometer," or as a *representative fraction* (in this case,  $1/100,000$ ) or ratio (1 : 100,000).

*Small-scale* maps are maps based on small representative fractions (for example,  $1/1,000,000$  or  $1/10,000,000$ ). Small-scale maps cover a large part of Earth's surface on the printed page. A map drawn on this page to the scale of 1 : 10,000,000 would cover about half of the United States; a map drawn to the scale of 1 : 16,000,000 would easily cover the whole of Europe. *Large-scale* maps are maps based on larger representative fractions (e.g.  $1/25,000$  or  $1/10,000$ ). A map drawn on this page to the scale 1 : 10,000 would cover a typical suburban subdivision; a map drawn to the scale of 1 : 1,000 would cover just a block or two of it.

### Map Projections

A map projection is a systematic rendering on a flat surface of the geographic coordinates of the features found on Earth's surface. Because Earth's surface is curved and it is not a perfect sphere, it is impossible to represent on a flat plane, sheet of paper, or monitor screen without some distortion. Cartographers have devised a number of different techniques of projecting latitude and longitude (see Figure 1.3) on to a flat surface, and the resulting representations of Earth each have advantages and disadvantages. None of them can represent distance correctly in all directions, though many can represent compass bearings or area without distortion. The choice of map projection depends largely on the purpose of the map.

Projections that allow distance to be represented as accurately as possible are called **equidistant projections**. These projections can represent distance accurately only in one direction (usually north-south), although they usually provide accurate scale in the

perpendicular direction (which in most cases is the equator). Equidistant projections are often more aesthetically pleasing for representing Earth as a whole, or large portions of it. An example is the Polyconic projection (**Figure 1.12**).

**Figure 1.12** (comparison of map projections)

Projections on which compass directions are rendered accurately are known as **conformal projections**. Another property of conformal projections is that the scale of the map is the same in any direction. The Mercator projection (Figure 1.12), for example, preserves directional relationships between places, and so the exact compass distance between any two points can be plotted as a straight line. As a result, it has been widely used in navigation. As Figure 1.12 shows, however, the Mercator projection distorts area more and more toward the poles—so much so that the poles cannot be shown as single points. Some projections are designed such that compass directions are correct only from one central point. These are known as **azimuthal projections**. They can be equidistant, as in the Azimuthal Equidistant projection (Figure 1.12), which is sometimes used to show air-route distances from a specific location, or equal-area, as in the Lambert Azimuthal Equal-Area projection.

Projections that portray areas on Earth's surface in their true proportions are known as **equal-area** or **equivalent projections**. Such projections are used where the cartographer wishes to compare and contrast distributions on Earth's surface: the relative area of different types of land use, for example. Examples of equal-area projections include the Eckert IV projection, Bartholomew's Nordic projection and the Mollweide projection (Figure 1.12). Equal-area projections such as the Mollweide projection are especially useful for thematic maps showing economic, demographic, or cultural data. Unfortunately, preserving accuracy in terms of area tends to result in world maps on which many locations appear squashed and have unsatisfactory outlines.

For some applications, aesthetic appearance is more important than conformality, equivalence or equidistance, and so cartographers have devised a number of other projections. Examples include the Times projection, which is used in many world atlases, and the Robinson projection, which is used by the National Geographic society in many of its publications. The Robinson projection (**Figure 1.13**) is a compromise projection that distorts both area and directional relationships but provides a general-purpose world map. There are also political

considerations. Countries may appear larger and so more “important” on one projection rather than another. The Peters projection, for example (**Figure 1.14**), is a deliberate attempt to give prominence to the underdeveloped countries of the equatorial regions and the southern hemisphere. As such, it was officially adopted by the World Council of Churches and by numerous agencies of the United Nations and other international institutions. Its unusual shapes give it a shock value that gets people’s attention. For some, however, its unusual shapes are ugly: It has been likened to laundry hung out to dry.

**Figure 1.13 (Robinson projection)**

**Figure 1.14 (Peters projection)**

In this book, we shall sometimes use another striking projection, the Dymaxion projection devised by Buckminster Fuller (**Figure 1.15**). Fuller was a prominent modernist architect and industrial designer who wanted to produce a map of the world with no significant distortion to any of the major land masses. The Dymaxion projection does this, though it produces a world that, at first, may seem disorienting. This is not necessarily such a bad thing, for it can force us to take a fresh look at the world, and at the relationships between places. Because Europe, North America, and Japan are all located toward the center of this map projection, it is particularly useful for illustrating two of the central themes of this book: the relationships among these prosperous regions, and the relationships between this prosperous group and the less prosperous countries of the world. On Fuller’s projection, the economically peripheral countries of the world are shown as being cartographically peripheral, too.

**Figure 1.15 (Buckminster Fuller Projection)**

One particular kind of map projection that is sometimes used in small-scale thematic maps is the cartogram. In this kind of projection, space is transformed according to statistical factors, with the largest mapping units representing the greatest statistical values. **Figure 1.16 (a)** shows a cartogram of the world in which countries are represented as proportional to their population. This sort of projection is particularly effective in helping to visualize relative inequalities among the world’s populations. **Figure 1.16 (b)** shows a cartogram of the world in which the cost of telephone calls has been substituted for linear distance as the basis of the map. The deliberate distortion of the shapes of the continents in this sort of projection provides a dramatic way of emphasizing spatial variations.

**Figure 1.16 (cartograms)**

Finally, the advent of computer graphics has made it possible for cartographers to move beyond the use of maps as two-dimensional representations of Earth's surface. Computer software that renders three-dimensional statistical data on to the flat surface of the monitor screen or a piece of paper facilitates the **visualization** of many aspects of regional geography in innovative and provocative ways (**Figure 1.17**)

Figure 1.17 (vizationalization)

### Interdependence

Interdependence between places and regions can be sustained only through movement and flows. Geographers use the term *spatial interaction* as shorthand for all kinds of movement and flows that involve human activity. Freight shipments, commuting, shopping trips, migration, vacation travel, telecommunications, and electronic cash transfers are all examples of spatial interaction. In terms of regional change, one of the most important aspects of spatial interaction and interdependence is **spatial diffusion**—the way that things spread through space and over time. Disease outbreaks, technological innovations, political movements, and new musical fads all originate in specific places and subsequently spread to other places and regions through process of spatial diffusion. Diffusion seldom occurs in an apparently random way, jumping unpredictably all over the map. Rather, it occurs in ways that can be predicted and modeled using statistical probability. The diffusion of a contagious disease, for example, is a function of the probability of physical contact, modified by variations in individual resistance to the disease. The diffusion of an agricultural innovation, such as genetically modified corn, is a function of the probability of information flowing between members of the farming community (itself partly a function of distance), modified by variations in individual farmers' receptivity to innovative change and their ability to pay for the innovation.

In order for any kind of spatial interaction to occur between two places, there must be a demand in one place and a supply that matches, or complements it, in the other. This complementarity can occur as a result of several factors. One important factor is the variation in physical environments and resource endowments from place to place. For example, a heavy flow of vacation travel from often cool and damp Scottish cities to warm, sunny Mediterranean resorts is a largely a function of climatic complementarity. To take another example, the flow of crude oil from Saudi Arabia (with vast oil reserves) to Japan (with no oil reserves) is a function of complementarity in natural resource endowments (**Figure 1.18**).

Figure 1.18: photo: Japanese supertanker loading in Gulf

A second factor that contributes to complementarity is the international division of labor that derives from the evolution of the world's economic systems. The more affluent and powerful countries of the world have sought to establish overseas suppliers for their food, raw materials, and exotic produce, allowing the more affluent countries to specialize in more profitable manufacturing and knowledge-based industries (see Chapter 2, p. 000). Over past centuries, less powerful countries have found themselves with economies that directly complement the needs of the more affluent countries. This has been partly through **colonialism**—the establishment and maintenance of political and legal domination by a **state** over a separate and alien society—partly through **imperialism**—the extension of the power of a state through direct or indirect control of the economic and political life of other territories—and partly through sheer economic dominance on the part of these more affluent and powerful states. Among the many flows resulting from this complementarity are shipments of sugar from Barbados to the United Kingdom, bananas from Costa Rica and Honduras to the United States, palm oil from Cameroon to France, automobiles from France to Algeria, school textbooks from the United Kingdom to Kenya, and investment capital from the United States to most other countries.

A third factor that contributes to complementarity is the operation of principles of specialization and economies of scale. Individual regions and countries can derive economic advantages from the efficiencies created through specialization, which allows for larger-scale operations. **Economies of scale** are cost advantages to manufacturers that accrue from high-volume production, since the average cost of production falls with increasing output (**Figure 1.19**). Among other things, fixed costs (for example, the cost of renting or buying factory space, which will be the same—fixed—whatever the level of output from the factory) can be spread over higher levels of output, so that the average cost of production falls. Economic specialization results in interdependence, which in turn contribute to patterns of spatial interaction. One example is the specialization of Israeli farmers in high-value fruit and vegetable crops for export to the European Union, which in return exports grains and root crops to Israel.

Figure 1.19: diagram of economies of scale

Spatial interdependence also varies over time as successive innovations in transport and communications technologies and

successive waves of infrastructure development (canals, railways, harbor installations, roads, bridges, and so on) alter the geography of transport costs. New technologies and new or extended infrastructures have the effect of altering the costs of moving particular things between one place and another. As a result, the spatial organization of many different activities is continually changing and readjusting in order to take advantage of reduced transport costs. The consequent tendency toward a shrinking world gives rise to the concept of **time-space convergence**, the rate at which places move closer together in travel or communication time or costs.

Time-space convergence results from a decrease in the friction of distance as new technologies and infrastructure improvements successively reduce travel and communications time between places. Such space-adjusting technologies have, in general, brought places “closer” together over time. Other important space-adjusting innovations include air travel and air cargo, telegraphic, telephonic, and satellite communications systems; state postal services, package delivery services, and fax machines; modems, fiber-optic networks, and electronic-mail software.

What is most significant about the latest developments in transport and communication is that they are not only global in scope but also able to penetrate to local scales. As this is happening, some places that are distant in kilometers are becoming close together, while some that are close in terms of absolute space are becoming more distant, in terms of their ability to reach one another electronically. Much depends on the mode of communication: the extent to which people in different places are “plugged in” to new technologies. Older wire cable can carry only small amounts of information; microwave channels are good for person-to-person communication, but depend on line-of-sight; telecommunications satellites are excellent for reaching remote areas but involve significant capital costs for users, while fiber-optic cable is excellent for areas of high population density but not feasible for remoter, rural areas.

## **A WORLD OF REGIONS**

Places and regions are dynamic, with changing properties and fluid boundaries that are the product of the interplay of a wide variety of environmental and human factors. This dynamism and complexity is what makes travel so fascinating for many people. It is also what makes places and regions so important in shaping people's lives and in influencing the pace and direction of change.

Places and regions exert a strong influence, for better or worse, on people's physical well-being, their opportunities, and their lifestyle choices. Places and regions also contribute to peoples' collective memory and can become powerfully symbolic. Think, for example, of the evocative power for most Americans of a region like rural New England. The stereotype of small-town New England (**Figure 1.20**), “marked by a steeple rising gracefully above a white wooden church which faces on a village green around which are arrayed large white clapboard houses which, like the church, show a simple elegance in form and trim”<sup>4</sup> is widely taken to symbolize not just a certain type of regional architecture but the best that Americans have known “of an intimate, family-centered, Godfearing, morally conscious, industrious, thrifty, democratic community.” Meanwhile, for many people there are also ordinary geographic settings with special meaning: a childhood neighborhood, an ancestral homeland, or a family vacation area. This layering of meanings reflects the way that places are socially constructed—given different meanings by different groups for different purposes. Places exist, and are constructed, from a subjective point of view by their inhabitants. At the same time, though, the same places will likely be constructed rather differently by outsiders. Your own neighborhood, for example, centered on yourself and your home, is probably heavily laden with personal meaning and sentiment. But your neighborhood may well be viewed very differently, and perhaps unsympathetically, from an outsider's perspective. This distinction is useful in pointing to the importance of understanding places and regions from the point of view of the insider—the person who normally lives in and uses a particular place—as well as from the point of view of outsiders (including geographers).

**Fig 1.20: New England landscape**

Finally, places and regions can be crucibles for innovation, change, and resistance. The unique characteristics of specific places and regions can provide the preconditions for new agricultural practices (for example, the development of seed agriculture and the use of plow and draft animals that sparked the first agricultural revolution in the Middle East in prehistoric times), for new modes of economic organization (for example, the Industrial Revolution that began in the English Midlands in the late eighteenth century), for new cultural

---

<sup>4</sup> D. Meinig, “Symbolic Landscapes”. In D. W. Meinig et al. , eds., The Interpretation of Ordinary Landscapes. New York: Oxford University Press, 1979, p. 165.

practices (the hip-hop movement that began in New York's Bronx neighborhoods, for example), and for new lifestyles (for example, the "hippie" lifestyle that began in San Francisco in the late 1960s). It is in specific locales that important events happen, and it is from them that significant changes spread.

Nevertheless, the influence of places and regions is by no means limited to the occasional innovative change. Because of their distinctive characteristics, places and regions always modify and sometimes resist the imprint of even the broadest economic, cultural, and political trends. Consider, for example, the way that a global cultural trend—rock 'n' roll—interacted with an already complex Jamaican music to produce reggae; while in Iran and North Korea, rock 'n' roll has been resisted by the authorities, with the result that it has acquired an altogether different kind of value and meaning for the citizens of those countries.

### **The Regional Approach**

At the heart of geographers' concern with understanding how combinations of environmental and human factors produce regions with distinctive landscapes and cultural attributes is the belief that this "regional approach" is one of the best ways of organizing knowledge about the world. There are, however, different methods of regional analysis and different ways of identifying and defining regions. Place making and regional differentiation are products of many factors, while the outcomes of place making and regional differentiation require careful consideration in terms of the attributes of landscape and sense of place.

### Regionalization

Regionalization is the geographer's equivalent of scientific classification, with individual places or areal units being the objects of classification. The purpose of regionalization is to identify "regions" of one kind or another. There are several ways in which individual areal units can be assigned to classes (regions). One is that of *logical division*, or "classification from above." This involves partitioning a universal set of areal units into successively larger numbers of classes, using more specific criteria at every stage. Thus a world regional classification of national states might be achieved by first differentiating between rich and poor countries, then dividing both rich and poor countries into those countries that have a trade surplus and those that have a deficit, and so on. A second way in which individual areal units can be assigned to classes (regions) is that of *grouping*, or "classification from

below." This involves searching for regularities or significant relationships among areal units and grouping them together in successively smaller numbers of classes, using a broader measure of similarity at each stage.

An implicit assumption in this type of classification of areal units into regions is that each unit is homogeneous with respect to the attribute or attributes under consideration. Where this assumption holds true, the result of regional classification is a set of formal regions. **Formal regions** are groups of areal units that have a high degree of homogeneity in terms of particular distinguishing features (such as religious adherence or household income). Few phenomena, however, exhibit such homogeneity over large areal units. For this reason, geographers also recognize **functional regions** (sometimes referred to as "nodal regions")—regions that are defined and classified by patterns of spatial interaction or spatial organization. Functional regions are those within which, while there may be some variability in certain attributes (again, for example, religious adherence and income), there is an overall coherence to the structure and dynamics of economic, political, and social organization. The concept of functional regions allows us to recognize that the coherence and distinctive characteristics of a region are often, in reality, stronger in some places than in others. This point is illustrated by geographer Donald Meinig's *core-domain-sphere* model, which he set out in his classic essay on the Mormon region of the United States.<sup>5</sup> In the core of a region, the region's distinctive attributes are very clear; in the domain, they are dominant, but not to the point of exclusivity; in the sphere, they are present but not dominant.

In addition to these questions of classification, the art and science of the regional approach must consider questions of *geographic scale*, for we can (and must) see the world as, simultaneously, a mosaic of small-scale regions that exist within successively larger spatial frameworks. These frameworks are closely related, as both cause and effect, to the formal boundaries that have evolved (and that are continually challenged and amended) under national and international law. Finally, people's own conceptions of place, region, and identity may resonate with or against these boundaries to generate strong feelings of *regionalism* and *sectionalism* that feed back into the processes of place making and regional differentiation. **Regionalism** is a term used to describe situations where different religious or ethnic groups with distinctive

---

<sup>5</sup> D. Meinig, "The Mormon Culture Region: Strategies and Patterns in the Geography of the American West," Annals, Association of American Geographers, 55, 1965, pp. 191-220.

identities coexist within the same state boundaries, often concentrated within a particular region and sharing strong feelings of collective identity. If such feelings develop into an extreme devotion to regional interests and customs, the condition is known as **sectionalism**.

### Landscape

Geographers think of landscape as a comprehensive product of human action such that every landscape is a complex repository of society. It is a collection of evidence about our character and experience, our struggles and triumphs as humans. To understand better the meaning of landscape, geographers have developed different categories of landscape types based on the elements contained within them. **Ordinary landscapes** (or vernacular landscapes, as they are sometimes called) are the everyday landscapes that people create in the course of their lives together. From crowded city centers to leafy suburbs and quiet rural villages, these are landscapes that are lived in and changed and that in turn influence and change the perceptions, values, and behaviors of the people who live and work in them.

**Symbolic landscapes**, by contrast, stand as representations of particular values or aspirations that the builders and financiers of those landscapes want to impart to a larger public. For example, the neoclassical architecture of the buildings of the federal government in Washington, DC, along with the streets, parks, and monuments of the capital, constitute a symbolic landscape intended to communicate a sense of power, but also of democracy in its imitation of the Greek city-state.

Geographers now recognize that there are many layers of meaning embodied in the landscape, meanings that can be expressed and understood differently by different social groups at different times. Landscapes reflect the lives of ordinary people as well as the more powerful, and they reflect their dreams and ideas as well as their material lives. The messages embedded in landscapes can be read as signs about values, beliefs, and practices, though not every reader will take the same message from a particular landscape (just as people may differ in their interpretation of a passage from a book). In short, landscapes both produce and communicate meaning, and one of our tasks as geographers is to interpret those meanings.

### Sense of Place

The experience of everyday routines in familiar settings allows people to derive a pool of shared meanings. People become familiar with one

another's vocabulary, speech patterns, gestures, humor, and with shared experiences of the physical environment such as vegetation and climate. Often, this carries over into people's attitudes and feelings about themselves and their locality. When this happens the result is a self-conscious sense of place. The concept of a **sense of place** refers to the feelings evoked among people as a result of the experiences and memories that they associate with a place, and to the symbolism they attach to that place. It can also refer to the character of a place as seen by outsiders: its unique or distinctive physical characteristics and/or its inhabitants.

For *insiders*, this sense of place develops through shared dress codes, speech patterns, public comportment, and so on. It also develops through familiarity with the history and symbolism of particular elements of the physical environment—a local mountain or lake, for example, the birthplace of someone notable, the location of some particularly well known event, or the expression of community identity through community art (**Figure 1.21**). Sometimes, it is deliberately fostered by the construction of symbolic structures such as monuments and statues. Often, it is a natural outcome of people's familiarity with one another and their surroundings. Because of this consequent sense of place, insiders feel at home and “in place.”

**Figure 1.21: photo of community art**

For *outsiders*, a sense of place can be evoked only if local landmarks, ways of life, and so on are distinctive enough to evoke a significant common meaning for people who have no direct experience of them. Central London, for example, is a setting that carries a strong sense of place to many outsiders, who can feel a sense of familiarity with the riverside panoramas, busy streets, and distinctive monuments and historic buildings that together symbolize the heart of the city.

### **Scale**

Different aspects of regional differentiation are understood best, and most effectively analyzed, at different spatial scales. At the same time, these different aspects are interrelated and interdependent, so that geographers have to be able to relate things at one scale to things at another. The whole question can be problematic if we do not clarify what “scale” means.

It is useful to think of geographical scales as being materializations of real-world processes, not simply different levels of abstraction or convenient devices for zooming in and out from the global context to the detail of local settings. In this sense, scale represents a tangible partitioning of space within which different processes (economic, social, political, etc.) are played out. This partitioning, in turn, often consolidates the importance of particular patterns of geographical organization, at least until some major change occurs in the relationships among the forces of nature, culture, and human agency. The Industrial Revolution, for example, changed not only the character of economic development (from agrarian to manufacturing) but also the scales at which industrial production and consumption were organized (from local to national and international).

### World Regions

At any particular moment we can thus identify a sequence of specific scales that represent significant confluences of geographical processes. In today's world, the large scale is represented by international regions, or world regions, large but relatively homogeneous territories with distinctive economic, cultural, and demographic characteristics (Figure 1.22). **World regions** are large-scale geographic divisions based on continental and physiographic settings that contain major clusters of humankind with broadly similar cultural attributes. Examples would be Europe, Latin America, and South Asia, as shown in Figure 1.1. These regions are constructed, unraveled, and reconstructed as the realities of natural resources and technologies form a framework of opportunities and constraints to which particular cultures and societies respond.

**Fig. 1.22: diagram illustrating spatial scales**

### National States

Superimposed on these regions, sometimes with only an approximate fit, are the formal, *de jure* territories of national states. *De jure* simply means legally recognized. Territories delimited by formal, legally recognized boundaries—national states, provinces, states, counties, municipalities, special districts, and so on—are known as *de jure* spaces or regions. Because of the inherent power of national governments, especially in relation to the flows of goods, money, and information that underpin “reality,” national states represent a geographic scale that is often very important. National states tend to be established to “fit” economic reality as closely as possible at the time of their foundation. Once their boundaries are set, however, principles of national sovereignty mean that these boundaries tend increasingly to become

regarded by their inhabitants as somehow natural or immutable. National political boundaries are not, though, fixed and unchanging. When economic circumstances change, national states may feel the need to adjust their boundaries or seek other means of accommodating to economic reality, such as joining supranational organizations. **Supranational organizations** are collections of individual states with a common goal that may be economic and/or political in nature and that diminish, to some extent, individual state sovereignty in favor of the group interests of the membership. Examples of supranational organizations include the European Union (EU), the North American Free Trade Association (NAFTA), and the Association of South East Asian Nations (ASEAN).

Within most national states and all international regions are smaller, functional regions. This geographical scale is constructed around specific resources and industries, with their networks of producers, suppliers, distributors, and ancillary activities; and their associated social, cultural and political identities. These are the classic functional regions of traditional regional geography, and examples are the American Corn Belt, the Argentine pampas, the Scottish coalfields, Japan's Pacific Corridor, and the Urals manufacturing region in Russia.

#### Community, Home, and Body

The realm of experience, for most people, is encompassed by the scale of human settlements. This is the scale that is constructed around the way people's lives are organized through their work, consumption, and recreation. It is also roughly coincident with another important scale of *de jure* territories: local municipalities that provide the framework for public administration and the means for "collective consumption" of certain goods and services (public transport, education, public housing, recreational amenities, and so forth).

But within the realm of experience there are other significant scales (Figure 1.22). Of these, the scale of community is the most important but also the most difficult to pin down. It is the scale of social interaction--of personal relationships and daily routine. It is a scale that depends a great deal on the economic, social, and cultural attributes of local populations. Much more sharply defined is the scale of the home, which is an important geographic site insofar as it constitutes the physical setting for the structure and dynamics of family and household. It also reflects, in its own spatial organization, the

differential status accorded to men and women, and to the young and the elderly.

Finally, the body and the self represent the most detailed scale that geographers have to deal with. The body is of interest to geographers because it represents the scale at which difference and diversity are ultimately defined: not only through physical attributes (for example, racial characteristics) but also through the socially constructed attributes of the body, such as norms of personal space, preferred bodily styles, and acceptable uses of our bodies. Particularly important is the way that, in many cultures, the bodily scale is seen as less relevant to males. That is, males are regarded as being able to “transcend” the body while females are regarded as being “trapped” by bodily attributes (for example, sensuality and nurturance) and functions (for example, menstruation, pregnancy, and childbirth). The result is that differential geographies are created and experienced by men and women--women's bodies and women's domestic spaces, but men's world(s). The self is of interest because it represents the operational scale for cognition, perception, imagination, free will, and individual behavior. The self has become an important scale of analysis for geographers because of the need to understand the interrelationships between nature, culture, and individual human agency in shaping places and regions.

Perhaps the most important conclusion that we can draw from this examination of scale is that, while certain phenomena can be identified and understood best at specific spatial scales, the reality of regional geographies is that they are very fluid phenomena, constantly being constructed, reinforced, undermined, and rebuilt. Similarly, although certain scales represent materializations of powerful real-world processes, the real world has to be understood, ultimately, as the product of interdependent phenomena at a variety of spatial scales. It follows that every world region should be seen in its diversity, comprised of metropolitan cores and rural peripheries, each of which is part of a broader framework of interdependent places and regions within the global economy.

### **Boundaries and Frontiers**

Boundaries are important phenomena because they allow claims on space to be defined and enforced, and because they allow conflict and competition to be managed and channeled. The creation of boundaries is, therefore, an important element in region building and place making. Formal boundaries are normally inclusionary—that is, they are constructed in order to regulate and control specific sets of people and

resources (**Figure 1.23**). Encompassed within a clearly defined area, all sorts of activity can be controlled and regulated—everything, in fact, from birth to death. The delimited area over which a state exercises control and that is recognized by other states is called **territory**. Such an area may include both land and water.

**Figure 1.23: photo of United States/Canada Border**

Formal boundaries can also be exclusionary, however. Again, this often fulfills the function of controlling people and resources. National boundaries, for example, can be used to control the flow of immigrants or the flow of imported goods (**Figure 1.24**). Municipal boundaries and land-use zoning boundaries can be used to regulate access to upscale residential neighborhoods; field boundaries can be used to regulate access to pasture; and so on (**Figure 1.25**).

**Figure 1.24: aerial photo of United States/Mexico Border**

**Figure 1.25: photo of field boundaries**

The key point is that, once established, formal boundaries tend to reinforce regional differentiation. This is partly because of the outcomes of the operation of different sets of rules, both formal and informal, that apply within different regions and territories. It is also partly because boundaries often restrict contact between people and so foster the development of stereotypes of "others." This restricted contact, in turn, reinforces the role of boundaries in regulating and controlling conflict and competition between territorial groups.

Boundaries can be established in many different ways, however, and with differing degrees of permeability. At one extreme are informal, implied boundaries that are set by markers and symbols but never delineated on maps or set down in legal documents. Good examples are the "turf" of a city gang; the "territory" of an organized crime "family"; and the range of a pastoral tribe. At the other extreme are formal boundaries established in international law, delimited on maps, demarcated on the ground, fortified, and aggressively defended—not only against the movement of people but also of goods, money, and even ideas. An extreme example of this sort of boundary is the one between North and South Korea (**Figure 1.26**). In-between are formal boundaries that have some degree of permeability. The boundaries between the states of the European Union, for example, have become quite permeable, since people and goods from member states can now move freely between them, with no customs or passport controls (see Chapter 3, p. 000).

**Figure 1.26: photo of North/South Korean Border**

Impermeability does not necessarily mean immutability, however. The boundary between East and West Germany, part of the "Iron Curtain" for more than 40 years, was as aggressively defended as the present boundary between North and South Korea, yet it is now dissolved, having been made obsolete by the unification of Germany (**Figure 1.27**).

Similarly, the boundaries of the former Soviet Union have been entirely redrawn since 1989, allowing states like Lithuania and Estonia to

**Figure 1.27: photo of border Between East and West Germany**

### Frontier Regions

Frontier regions occur where boundaries are very weakly developed or where population densities are especially low. They involve zones of underdeveloped human settlement, areas that are distinctive for their marginality rather than for their belonging. In the nineteenth century, for example, some vast frontier regions still existed such as Australia, the American West, the Canadian North, and sub-Saharan Africa—major geographic realms that had not yet been conquered, understood, and settled by the states claiming jurisdiction over them (though there were of course indigenous groups with no apparatus of formal state boundaries). All of these frontier regions are now subject to formal occupancy at various spatial scales (that is, from codified individual land ownership to local and national governmental jurisdiction). Only Antarctica, virtually unsettled, exists today as a frontier region in this sense.

There remain, nevertheless, many frontier regions that are still marginal (in that they have not been fully settled or do not have a recognized economic potential), even though national political boundaries and sovereignty are clear-cut. Examples are the Amazon River basin (see Chapter 8, p. 000), and the Sahelian region of Africa (Chapter 6, p. 000). Such regions often span national boundaries simply because they are inhospitable, inaccessible, and, at least at the moment, economically unimportant. Political boundaries sometimes get drawn through them because they represent the line of least territorial resistance.

At the local level, many examples of frontier regions exist. Although the residents of most towns and cities recognize a series of distinctive districts and neighborhoods, these are often separated by zones or spaces that are frontierlike. Not fully integrated into the territorial realm of any one sociocultural group, these "frontier" spaces are often transitional, with a relatively rapidly changing pattern of land use and an equally rapidly changing profile of residents.

### Boundary Formation

Generally speaking, formal boundaries tend first to follow natural barriers such as mountain ranges, lakes, oceans, and, sometimes, rivers. A good example of countries with an important mountain-range boundary is that of India with China and Nepal, where the Himalayas act as a formidable barrier. Chile, though, provides the ultimate example: a cartographic freak, restricted by the Andes to a very long and relatively thin strip along the Pacific coast. An example of countries with a boundary partly shaped by major lakes is that of Canada and the United States (along the Great Lakes). Countries with boundaries formed by rivers Laos and Thailand (the Mekong); Zambia and Zimbabwe (the Zambezi); and the United States and Mexico (Rio Grande, Rio Bravo). It should be noted, though, that while major rivers can form natural physical barriers, river basins often form the basis of functional economic regions. As a result, river basins are more often encompassed by formal boundaries than split along the course of the river itself.

Where no natural features occur, and usually before any heavy human settlement, formal boundaries tend to be fixed along the easiest and most practical cartographic device: a straight line. Examples include the boundaries between Egypt and Libya, between Syria and Iraq, and the western part of the boundary between the United States and Canada. Straight-line boundaries are also characteristic of formal boundaries that are established through colonization, which is the outcome of a particular form of territoriality. The reason, once again, is practicality. Straight lines are easy to survey, and even easier to delimit on maps of territory that remains to be fully charted, claimed, and settled. Straight-line boundaries were established, for example, in many parts of Africa during European colonization in the nineteenth century.

In detail, however, formal boundaries often detour from straight lines and natural barriers in order to accommodate special needs and claims. Colombia's border, for instance, was established to contain the source of the River Orinoco; the border of the Democratic Republic of Congo (formerly Zaïre) was established to provide a corridor of access to the Atlantic Ocean; and Sudan's border detours in order to include a settlement, Wadi Halfa.

After primary divisions have been established, internal boundaries tend to evolve as smaller, secondary territories are demarcated. In general, the higher the population density, the smaller these secondary units

tend to be. Their configuration tends to follow the same generalizations as for larger units, following physical features; accommodating special needs; and following straight lines where there are no appropriate natural features, or where colonization has made straight lines expedient. This last reason, for example, explains the generally rectilinear pattern of administrative boundaries in the United States to the west of the Mississippi.

Historically, the world has evolved from a loose patchwork of territories (with few formally defined or delimited boundaries) to nested hierarchies (**Figure 1.28**) and overlapping systems of *de jure* territories. These *de jure* territories are often used as the basic units of analysis in regional geography, largely because they are both convenient and significant units of analysis. They are often, in fact, the only areal units for which reliable data are available. They are also important units of analysis in their own right, because of their importance as units of governance or administration. A lot of regional analysis and nearly all attempts at regionalization, therefore, are based on a framework of *de jure* spaces.

**Figure 1.28: diagram showing nested hierarchy of *de jure* territories**

### **Regionalism and Sectionalism**

Regionalism often involves ethnic groups whose aims include autonomy from a national state and the development of their own political power. A good example is Basque regionalism. Basque regionalism, or “Basquism,” represents a regional movement that has roots back to industrialization and modernization beginning at the turn of the nineteenth century. The Basque people of northeastern Spain and the southern part of Aquitaine in southwestern France (**Figure 1.29**) feared that cultural forces accompanying industrialization would undermine Basque preindustrial traditions. Because of this, the Basque provinces of Spain and France have sought autonomy from those states for most of the twentieth century. Since the 1950s, agitation for political independence has occurred—especially for the Basques in Spain—through terrorist acts. For over 25 years, the French, Spanish, and more recently the Basque regional police have attempted to undermine the Basque Homeland and Freedom movement through arrests and imprisonments. Not even the Spanish move to parliamentary democracy and the granting of autonomy to the Basque provinces, however, could slake the thirst for self-determination among the Basques in Spain (**Figure 1.30**). Meanwhile, on the French side of the Pyrenees, although a Basque separatist movement does exist, it is neither as violent nor as active as the movement in Spain.

Figure 1.29 map of Basque country

Figure 1.30: photo showing Basque independence poster

In certain cases, enclaves of ethnic minorities are claimed by the government of a country other than the one in which they reside. Such is the case, for example, of Serbian enclaves in Croatia, claimed by nationalist Serbs (see Chapter 3, p. 000). The assertion by the government of a country that a minority living outside its formal borders belongs to it historically and culturally is known as **irredentism**. In some circumstances, as with Serbia's claims on Serbian enclaves in Croatia in the early 1990s, irredentism can lead to war.

We need only look at the long list of territorially based conflicts that have emerged in the post-Cold War world to realize the extent to which territorially based ethnicity remains a potent force in regional geography. For example, the Kurds continue to fight for their own state separate from Turkey and Iraq (see Chapter 5, p. 000). A significant proportion of Quebec's French-speaking population, already accorded substantial autonomy, persists in advocating complete independence from Canada (see Chapter 7, p. 000). In the most recent electoral vote on the issue, the separatists were only very narrowly defeated. Consider also the former Yugoslavia whose geography has fractured along the lines of ethnicity (see Chapter 3, p. 000).

Not to be confused with regionalism or irredentism is the concept of sectionalism, an extreme devotion to regional interests and customs. Sectionalism has been identified as an overarching explanation for the U. S. Civil War. It was an attachment to the institution of slavery and the political and economic way of life that slavery enabled that prompted the southern states to secede from the Union. The Civil War was fought to ensure that sectional interests would not take priority over the unity of the whole; that is, that state's rights would not undermine the power of the federal government. Although the Civil War was waged around the real issue of permitting or prohibiting slavery, it was also fought at another level, a level that dealt with issues of the power of the state. As **Figure 1.31** shows, the election of Abraham Lincoln to the presidency in 1860 reflected the sectionalism that dominated the country: He received no support from slave states.

Figure 1.31: map showing 1860 Presidential Elections

## PLACES AND REGIONS IN A CHANGING WORLD

Today, in a world that is experiencing rapid changes in economic, cultural, and political life, geographic knowledge is especially important and useful. In a fast-changing world, when our fortunes and our ideas are increasingly bound up with those of other peoples in other places, the study of geography provides an understanding of the crucial interdependencies that underpin everyone's life. One of the central themes throughout this book will be the interdependence of people, places, and regions.

### **The Interdependence of Regions**

Places and regions have an importance of their own, yet at the same time they are interdependent, each filling specialized roles in complex and ever-changing geographies. Consider, for example, the way that the New York region operates as a specialized global center of corporate management, business, and financial services while relying on thousands of other places to satisfy its needs. For labor it draws on analysts and managers from the country's business schools; blue- and pink-collar workers from neighboring communities; and skilled professional immigrants from around the world. For food it draws on fruits and vegetables from Florida, dairy produce from upstate New York, specialty foods from Europe, the Caribbean, and Asia. For energy it draws on coal from southwest Virginia to fuel its power stations and on oil from the Middle East to run its transportation systems. And for consumer goods it draws on specialized manufacturing settings all over the world.

This interdependence means that individual regions are tied in to wider processes of change that are reflected in broader geographical patterns. New York's attraction for business-school graduates, for example, is reflected in the overall pattern of migration flows that, cumulatively, affects the size and composition of labor markets around the country: New York's gain is somewhere else's loss. An important issue for regional geographers—and a central theme of this book—is to recognize these wider processes and broad geographical patterns without losing sight of the individuality and uniqueness of specific places and regions.

This means that we have to recognize another kind of interdependence: the interdependence that exists *between different geographic scales*. In today's world, some of the most important aspects of the interdependence between geographic scales are provided by the relationships between the *global* and the *regional* scales. New York again can illustrate both ends of this relationship.

In New York's stock exchanges and financial markets, brokers and clients must, in their own interest, take a global view of things. Their collective decisions influence stock prices, currency rates, and interest rates around the world, and these decisions often have very direct outcomes at the local level around the world. Factories in certain localities may be closed and workers laid off because changed currency rates make their product too expensive to export successfully; elsewhere, new jobs may be created because the same change in currency rates puts a different local economy at an advantage within the global marketplace. On the other hand, local events can reverberate through New York's stock exchanges and financial markets with global effects. Political instability in a region that produces a key commodity, for instance, can result in changes in global pricing. A striking example of this was provided in August 1990. Within 24 hours of Iraq's invasion of Kuwait, a major oil-producing country, gasoline prices in Europe and North America had risen by 10 percent. By the time United Nations forces interceded in January 1991, gasoline prices had increased by 36 percent, and the stock prices of many companies—especially those dependent on high inputs of oil or gasoline—had fallen significantly.

One of the most important tenets of regional geography is that places and regions are not just distinctive outcomes of geographical processes; they are part of the processes themselves. Regions are dynamic phenomena. They are created by people responding to the opportunities and constraints presented by their environments. As people live and work in particular geographic settings, they gradually impose themselves on their environment, modifying and adjusting it to suit their needs and express their values. At the same time, people gradually accommodate both to their physical environment and to the people around them. There is thus a *continuous two-way process*, in which people create and modify places while at the same time being influenced by the settings in which they live and work (**Figure 1.32**).

**Figure 1.32 place-making**

It is often useful to think of places and regions as representing the cumulative legacy of successive periods of change. For example, the present-day downtown of Edinburgh, Scotland, embodies elements of medieval, Georgian, Victorian, and modern urban fabric, while the regional landscape of Tuscany, in Italy, carries elements of Roman, medieval, Renaissance, and Modern development (**Figure 1.33**).

**Figure 1.33: Tuscany as the cumulative legacy of change**

Following this approach, geographers look for superimposed layers of development. We can show how some patterns and relationships last, while others are modified or obliterated. We can show how different regions bear the imprint of different kinds of change, perhaps in different sequences, and with different outcomes.

Processes of geographic change are constantly modifying and reshaping places and regions, and the inhabitants of places and regions are constantly coping with change. It is important for geographers to be sensitive to this kind of interdependence without falling into the trap of over-generalization, or losing sight of the diversity and variety that constitute the heart of regional geography. It is equally important not to fall into the trap of treating places or regions as separate entities, the focus of study in and of themselves.

### **Globalization**

Another important theme of this book will be globalization. **Globalization** involves the increasing interconnectedness of different parts of the world through common processes of economic, environmental, political, and cultural change. A world economy has been in existence for several centuries, and with it there has developed a comprehensive framework of sovereign national states and an international system of production and exchange. This system has been reorganized several times. Each time it has been reorganized, there have been major changes not only in world geography but also in the character and fortunes of individual regions.

The most recent round of reorganization has created a highly interdependent world. The World Bank has noted that “These are revolutionary times in the global economy.”<sup>6</sup> A study by the Bank has shown how globalization has affected the lives of four very different people in very different places: a Vietnamese peasant, a Vietnamese city dweller, a Vietnamese immigrant to France, and a French garment worker.

Duong is a Vietnamese peasant farmer who struggles to feed his family. He earns the equivalent of \$10 a week for 38 hours of work in the rice fields, but he works full-time only six months of the year—during the off-season he can earn very little. His wife and four children work with him in the fields, but the

---

<sup>6</sup> World Bank, World Development Report. Washington D.C.: The World Bank, 1995, page 1.

family can afford to send only the two youngest to school. Duong's eleven-year-old daughter stays at home to help with housework, while his thirteen-year-old son works as a street trader in town. By any standard Duong's family is living in poverty. Workers like Duong, laboring in family farms in low- and middle-income countries, account for about 40 percent of the world's labor force.

Hoa is a young Vietnamese city dweller experiencing relative affluence for the first time. In Ho Chi Minh City she earns the equivalent of \$30 a week working 48 hours in a garment factory—a joint venture with a French firm. She works hard for her living and spends many hours looking after her three children as well; her husband works as a janitor. But Hoa's family has several times the standard of living of Duong's and, by Vietnamese standards, is relatively well off. There is every expectation that both she and her children will continue to have a vastly better standard of living than her parents had. Wage employees like Hoa, working in the formal sector in low- and middle-income countries, make up about 20 percent of the global labor force.

Françoise is an immigrant in France of Vietnamese origin who works long hours as a waitress to make ends meet. She takes home the equivalent of \$220 a week, after taxes and including tips, for 50 hours work. By French standards she is poor. Legally, Françoise is a casual worker and has no job security, but she is much better off in France than she would have been in Vietnam. Her wage is almost eight times that earned by Hoa in Ho Chi Minh City. Françoise and other service workers in high-income countries account for about 9 percent of the global workforce.

Jean-Paul is a fifty-year-old Frenchman whose employment prospects look bleak. For ten years he has worked in a garment factory in Toulouse, taking home the equivalent of \$400 a week—twelve times the average in Vietnam's garment industry. But next month he will lose his job when the factory closes. Unemployment benefits will partly shield him from the shock, but his chances of matching his old salary in a new job are slim. Frenchmen of Jean-Paul's age who lose their jobs are likely to stay unemployed for more than a year, and Jean-Paul is encouraging his son to work hard in school so he can go to college and study computer programming. Workers in industry in high-income countries, like Jean-Paul, make up just 4 percent of the world's labor force.

These four families—two living in Vietnam, two in France—have vastly different standards of living and expectations for the future. Employment and wage prospects in Toulouse and Ho Chi Minh City are worlds apart, even when incomes are adjusted for differences in the cost of living. Françoise’s poverty wage would clearly buy Hoa a vastly more affluent lifestyle. And much of the world’s workforce, like Duong, works outside the wage sector, on family farms and in casual jobs, generally earning even lower incomes. But the lives of all workers in different parts of the world are increasingly intertwined. French consumers buy the product of Hoa’s labor, and Jean-Paul believes it is Hoa’s low wages that are taking his job; while immigrant workers like Françoise feel the brunt of Jean-Paul’s anger through Jean-Paul’s support of right-wing, nationalist politicians. Meanwhile, Duong struggles to save so that his children can be educated and leave the countryside for the city, where foreign companies advertise new jobs at better wages (see also *Geography Matters: Globalization and Interdependence*, p. 00).

#### *Geography Matters: Globalization and Interdependence*

Recently there has been a pronounced change in both the pace and the nature of globalization. New telecommunication technologies, new corporate strategies, and new institutional frameworks have all combined to create a dynamic new framework for real-world geographies. New information technologies have helped create a frenetic international financial system, while transnational corporations are now able to transfer their production activities from one region of the world to another in response to changing market conditions (**Figure 1.34**). This locational flexibility has meant that there is now a high degree of functional integration between economic activities that are increasingly dispersed, so that products, markets, and organizations are both spread and linked across the globe. Governments, in their attempts to adjust to this new situation, have sought new ways of dealing with the consequences of globalization, including new international political and economic alliances.

#### **Figure 1.34: photo illustrating globalized production**

All this adds up to an intensification of global connectedness and the beginnings of the world as one place. Or, to be more precise, it adds up this way for the 800 million or so of the world’s population (about 13 percent of the total) who are directly tied to global systems of production and consumption, and who have access to global networks of communication and knowledge. All of us in this

globalizing world are in the middle of a major reorganization of the world economy and a radical change in our relationships to other people and other places.

### **Nature-Society Interactions**

Inherent to the basic geographical concepts of landscape, place, and region are the interactions between people and the natural environment that shape landscapes and give places and regions their distinctive characteristics. Geography has contributed to several important ideas about the nature-society or human-environment relationship that assist in our understanding of regional geography.

The idea of *environmental determinism* proposes that human activity and development is determined by the limits set by the physical environment. Early twentieth century geographers such as Ellsworth Huntington and Ellen Churchill Semple argued that climate, landforms and soils were the major influences on patterns and levels of land use, economic development, and even human potential. They explained the lower levels of agricultural production and industrial development that they saw in the tropics as a result of high temperatures, humidity, and diseases that limited ecological potential, human energy, and most controversially, human intelligence. Although their ideas were rejected for their racist implications and concept of an all controlling nature, elements of environmental determinist thinking continue to emerge in explanations of regional and economic development problems.

Many critics of environmental determinism highlighted the ability of people to overcome the constraints of the natural environment using ingenuity, technology, and social organization. The concept of *adaptation* to the natural environment is associated with the geographical subfield of *cultural ecology* most closely associated with the work of Carl Sauer and his students. Cultural ecologists study how human society has adapted to environmental challenges such as aridity and steep slopes through technologies such as irrigation and terracing and the organization of people to construct and maintain these systems. These adaptations can be seen clearly in many traditional landscapes such as the rice terraces of South East Asia or the canals and reservoirs of the southwestern United States. More recent adaptations include the use of biotechnology and agricultural chemicals to increase agricultural production and the development of new pharmaceuticals to cope with diseases.

Human adaptation has gone far beyond responses to natural constraints to produce widespread modification of environment and landscapes. In some cases, the human use of nature has resulted in a decline in conditions commonly termed *environmental degradation or pollution*. For example, overcultivation of steep slopes can result in erosion of the soil needed for subsequent agricultural production, and the use of agricultural chemicals has caused the contamination of adjacent rivers and lakes by chemicals that are toxic to fish and humans. The industrial revolution produced a dramatic growth in the emissions of waste material to land, water and atmosphere and resulted in serious air pollution and health problems in many cities.

The massive transformation of nature by human activity has led geographers such as Neil Smith and Margaret Fitzsimmons to claim that we can no longer talk about "natural" environments or untouched wilderness. They use the concept of the *social production of nature* to refer to the refashioning of landscapes and species by human activity, especially capitalist production and labor processes.

Geographers have played a major role in highlighting the global scope of this transformation in their discussions of the *human dimensions of global environment change*, defined as the study of the social causes and consequences of changes in global environmental conditions. Of particular concern are global patterns of fossil fuel use and land use change that are producing serious changes in climate and biodiversity through carbon dioxide induced global warming or by deforestation.

Global climate change is causing sea levels to rise (as polar ice caps melt) and has increased the frequency of violent storms. Warmer oceans surrender greater quantities of water as evaporation. Warmer surface temperatures and more humid air masses intensify weather systems, resulting in fiercer cyclones and hurricanes. In 1998, worldwide flooding was the worst on record, with 96 floods in 55 countries, including the most serious flooding around China's Chang Jiang (Yangtze) River in half a century, and the most long-lasting on record in Bangladesh. In 1999, the twin disasters associated with global warming—flooding and violent storms—came together in one place as a particularly violent cyclone hit the low-lying coast of Bangladesh, pushing rivers backward and flooding much of the province of Orissa, killing an estimated 5,000 people and leaving hundreds of thousands homeless (**Figure 1.35**). During the twentieth century global sea level rose by 20 centimeters (7.9 inches), and a 1999 report by Britain's Meteorological Office warned that flooding will

increase more than ninefold over the next century, with four-fifths of the increase coming in South and Southeast Asia. Such a rise in sea level is potentially disastrous for some countries. About 70 percent of Bangladesh, for example, is at sea level, while much of Egypt's most fertile land, in the Nile delta, is also at sea level. Meanwhile, extensive regions of Africa, Asia, and Latin America are so marginal for agriculture that further drought could prove disastrous. In contrast, farmers in much of Europe and North America would welcome a local rise in mean temperatures, since it would extend their options for the kinds of crops that they could profitably raise.

**Figure 1.35** photo showing: 1999 Orissa floods

The causes and consequences of these changes vary considerably by world region. For example, the industrial countries have higher carbon dioxide emissions and poor, less-developed regions are experiencing rapid deforestation. In order to survive, the rural poor are often impelled to degrade and destroy their immediate environment, cutting down forests for fuelwood and exhausting soils with overuse. In order to meet their debt repayments, governments feel compelled to generate export earnings by encouraging the harvesting of natural resources.

We know enough about the growth of population and the changing geography of economic development to be able to calculate with some confidence that the air and water pollution generated by low-income countries will more than double in the next 15 years as they become more industrialized. We know, in short, that environmental problems will be inseparable from processes of demographic change, economic development, and human welfare. In addition, it is becoming clear that regional environmental problems are going to be increasingly enmeshed in matters of national security and regional conflict. The spatial interdependence of economic, environmental, and social problems means that some parts of the world are ecological time-bombs. The prospect of civil unrest and mass migrations resulting from the pressures of rapidly growing populations, deforestation, soil erosion, water depletion, air pollution, disease epidemics, and intractable poverty is real.

The global nature of environmental changes has led to calls for global solutions including international agreements to reduce pollution and protect species. A more benign relationship between nature and society has been proposed under the principle of *sustainable development*, a term that is now widely used but vaguely defined. One

definition is that of the World Commission on Environment and Development, chaired by the former prime minister of Norway, Gro Bruntland, stating that sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."<sup>7</sup> This definition incorporates the ethic of intergenerational equity with its obligation to preserve resources and landscapes for future generations. Geographers such as William Adams and Timothy O'Riordan consider sustainable development to include ecological, economic and social goals of preventing environmental degradation while promoting economic growth and social equality. Sustainable development means that economic growth and change should occur only when the impacts on the environment are benign or manageable and the impacts (both costs and benefits) on society are fairly distributed across classes and regions. This means finding less polluting technologies that use resources more efficiently, and managing renewable resources (those that replenish themselves such as water, fish, forests) so as to ensure replacement and continued yield. In practice, sustainable development policies of major international institutions, such as the World Bank, have promoted reforestation, energy efficiency and conservation, and birth control and poverty programs to reduce the environmental impact of rural populations. At the same time, however, the expansion and globalization of the world economy has resulted in increases in resource use and inequality that contradict many of the goals of sustainable development.

### **The Fast World and the Slow World**

As Ted Turner, owner of CNN, observed in a 1999 United Nations report on international development, "It is as if globalization is in fast forward, and the world's ability to react to it is in slow motion."<sup>8</sup>

Ted Turner's observation points to an increasing division that now exists between the "fast world" and the "slow world." The **fast world** consists of people, places, and regions directly involved, as producers and consumers, in transnational industry, modern telecommunications, materialistic consumption, and international news and entertainment. The **slow world**, which accounts for about 85 percent of the world's population, consists of people, places, and regions whose participation in transnational industry, modern

---

<sup>7</sup> World Commission on Environment and Development, Our Common Future (Brundtland Report), New York: Oxford University Press, 1987, p. 43.

<sup>8</sup> United Nations, *Human Development Report 1999*. New York: United Nations Development Programme, 1999, p. 100.

telecommunications, materialistic consumption, and international news and entertainment is limited. The slow world consists chiefly of less-developed countries but it also includes many rural backwaters, declining manufacturing regions and disadvantaged slums in affluent countries, all of them by-passed by this latest phase in the evolution of the modern world economy.

The center of gravity of the fast world is in the richer and more developed countries of the world. The United States, for example, with less than 5 percent of the world's population, accounts for more than 40 percent of the world's telephones. But the fast world also extends throughout the world to the more affluent regions, neighborhoods, and households that are "plugged in" to the contemporary world economy, whether as producers or consumers of its products and culture. The leading edge of the fast world is the Internet, the global web of computer networks that began in the United States in the 1970s as a decentralized communication system sponsored by the U.S. Department of Defense. Until the mid-1970s, there were less than 50 nodes (servers) in the whole system. Then, in the early 1980s, the original network (ARPANET) was linked with two important new networks: CSnet (funded by the National Science Foundation) and BITNET (funded by IBM). In July 1988 a high-speed backbone (NSFnet) was established in order to connect regional networks in the United States.

Today, these early networks have become absorbed into the Internet, a loose confederation of thousands of small, locally run computer networks for which there is no clear center of control or authority. The Internet has become the world's single most important mechanism for the transmission of scientific and academic knowledge. Roughly 50 percent of its traffic is electronic mail; the rest consists of scientific documents, data, bibliographies, electronic journals, bulletin boards, and a user interface to the Internet, the World Wide Web. In 1999 more than 56 million Internet hosts existed in more than 150 countries; somewhere between 150 and 180 million people had access to the Internet; and somewhere between 75 and 80 million people worldwide had Internet e-mail addresses. The Internet has been doubling in networks and users every year since 1990, but most Internet users are still in the world's affluent countries: At the beginning of 2000, about 55 percent were in North America, and another 23 percent were in Europe. The rest are in Japan, Australia and New Zealand, and in the fragmentary outposts of the fast world that are embedded within the larger metropolitan areas of less-

developed countries. Overall, 90 percent of all Internet traffic originates in, or is destined for, the United States (see *Geography Matters: The Digital Divide*, p. 00).

### *Geography Matters: The Digital Divide*

This division between fast and slow worlds is, of course, something of a caricature. In fact, the fast world encompasses almost *everywhere* but not *everybody*. As a result, regional geography now has to contend with the apparent paradox of people whose everyday lives are lived part in one world, part in another. Consider, for example, the shanty-town residents of Mexico City. With extremely low incomes, only makeshift housing, and little or no formal education, they somehow are knowledgeable about international soccer, music, film, and fashion, and are even able to copy fast-world consumption through cast-offs and knock-offs. Much the same could be said about the impoverished residents of rural Appalachia (substitute NASCAR racing for international soccer) and, indeed, about most regions of the slow world. Very few regions remain largely untouched by globalization.

### Globalization and Cultural Change

Anyone who has ever traveled between major world cities—or, for that matter, anyone who has been attentive to the backdrops of movies, television news stories, and magazine photojournalism—will have noticed the many familiar aspects of contemporary life in settings that, until recently, were thought of as being quite different from one another. Airports, offices, and international hotels have become notoriously alike, and their similarities of architecture and interior design have become reinforced by near-universal dress codes of the people who frequent them. The business suit, especially for males, has become the norm for office workers throughout much of the world. Jeans, T-shirts, and sneakers, meanwhile, have become the norm for both young people and those in lower-wage jobs. The same automobiles can be seen on the streets of cities throughout the world (though sometimes they are given different names by their manufacturers); the same popular music is played on local radio stations; and many of the movies shown in local theaters are the same (*Titanic*, *South Park*, and *Pokemon: the Movie*, for example). Some of the TV programming is also the same—not just the music videos on MTV, but CNN's news, major international sports events, drama series like *Baywatch* and *Ally McBeal* and comedy series like *Friends*. The same brand names also show up in stores and restaurants: Coca-Cola, Perrier, Carlsberg, Nestlé, Nike, Seiko, Sony, IBM, Nintendo,

and Microsoft, to list just a few. Everywhere there is Chinese food, pita bread, pizza, classical music, rock music, and jazz.

It is these commonalities that provide a sense of familiarity among the inhabitants of the “fast world.” From the point of view of cultural nationalism, the “lowest common denominator” of this familiarity is often seen as the culture of fast food and popular entertainment that emanates from the United States. Popular commentators have observed that cultures around the world are being Americanized, or “McDonaldized,” which represents the beginnings of a single global culture that will be based on material consumption, with the English language as its medium (**Figure 1.36**).

**Figure 1.36** photo: [Benneton in Romania](#)

There is certainly some evidence to support this point of view, not least in the sheer numbers of people around the world who view *Friends*, drink Coca-Cola, and eat in McDonald’s franchises or similar fast-food chains. Meanwhile, United States culture is increasingly embraced by local consumers and entrepreneurs around the world. Travel writer Pico Iyer, for example, describes finding dishes called “Yes, Sir, Cheese My Baby” and “Ike and Tuna Turner” in a local buffeteria in Guangzhou, China.<sup>9</sup> It seems clear that United States products are consumed as much for their symbolism of a particular way of life as for their intrinsic value. McDonald’s burgers, along with Coca-Cola, Hollywood movies, rock music, and NFL and NBA insignia have become associated with a lifestyle package that features luxury, youth, fitness, beauty, and freedom.

The economic success of the U.S. entertainment industry has helped reinforce the idea of an emerging global culture based on Americanization. In 1999, the entertainment industry was a leading source of foreign income in the United States, with a trade surplus of \$28 billion. Similarly, the United States transmits much more than it receives in terms of the sheer volume of cultural products. In 1999, the originals of over half of all the books translated in the world (more than 20,000 titles) were written in English. In terms of international flows of everything from mail and phone calls to press-agency reports, television programs, radio shows, and movies, a disproportionately large share originates in the United States.

---

<sup>9</sup> P. Iyer, *Video Nights in Kathmandu: Reports from the Not-So-Far East*. London: Black Swan, 1989.

Neither the widespread consumption of U.S. and U.S.-style products nor the increasing familiarity of people around the world with global media and international brand names, however, adds up to the emergence of a single global culture. Rather, what is happening is that processes of globalization are exposing the inhabitants of both the fast world and the slow world to a common set of products, symbols, myths, memories, events, cult figures, landscapes, and traditions. People living in Tokyo or Tucson, Turin or Timbuktu may be perfectly familiar with these commonalities without necessarily using or responding to them in uniform ways.

Equally, it is important to recognize that cultural flows take place in all directions, not just outward from the United States. Think, for example, of European fashions in U.S. stores; of Chinese, Indian, Italian, Mexican, and Thai restaurants in U.S. towns and cities; and of U.S. and European stores selling exotic craft goods from less-developed countries.

The answer to the question “Is there a global culture?” then, must be no. While an increasing familiarity exists with a common set of products, symbols, and events (many of which share their origins in U. S. culture of fast food and popular entertainment), these commonalties become configured in different ways in different places, rather than constitute a single global culture. The local interacts with the global, often producing hybrid cultures. Sometimes, traditional, local cultures become the subject of global consumption; sometimes it is the other way around.

#### The Increasing Significance of Places and Regions

At first glance, the emergence of the fast world, with its transnational architectural styles, dress codes, retail chains, and popular culture, and its ubiquitous immigrants, business visitors, and tourists, seems as if it might have brought a sense of placelessness and dislocation: a loss of territorial identity and an erosion of the distinctive sense of place associated with certain localities. Yet the common experiences associated with globalization are still modified by local geographies. The structures and flows of the fast world are variously embraced, resisted, subverted, and exploited as they make contact with specific places and specific communities. *In the process, places and regions are reconstructed rather than effaced.* Often, this involves deliberate attempts by the residents of a particular area to create or re-create territorial identity and a sense of place. Inhabitants of the fast world, in other words, still feel the need for enclaves of familiarity,

centeredness, and identity. Regional geographies change, but they don't disappear.

At first glance, it might seem that globalization will render geography obsolete—especially in the more affluent regions of the world. High-tech communications and the global marketing of standardized products seem as if they might soon wash away the distinctiveness of people and places, permanently diminishing the importance of differences between places. Far from it. The new mobility of money, labor, products, and ideas actually increases the significance of place in some very real and important ways.

- The more universal the diffusion of material culture and lifestyles, the more valuable regional and ethnic identities become. One example of this is the way that the French government has actively resisted the Americanization of French language and culture by banning the use of English words and phrases, and by subsidizing their domestic movie industry.
- The faster the information highway takes people into cyberspace, the more they feel the need for a subjective setting—a specific region or community—that they can call their own. Examples of this can be found in the private master-planned residential developments that have sprung up around every U.S. metropolitan area since the mid-1980s. Unlike most previous suburban developments, each of these master-planned projects has been carefully designed to create a sense of community and identity for their residents.
- The greater the reach of transnational corporations, the more easily they are able to respond to place-to-place variations in labor markets and consumer markets, and the more often and more radically that economic geography has to be reorganized. Athletic shoe manufacturers like Nike, for example, frequently switch production from one country to another in response to the changing international geography of wage rates and currencies.
- The greater the success of transnational corporations and the more pervasive global consumer products and global culture become, the more likely it is that they will be actively resisted (see *Geography Matters: Mobilization against Globalization*, p. 00).
- The greater the integration of transnational governments and institutions, the more sensitive people have become to localized cleavages of race, ethnicity, and religion. An example is the resurgence of nationalist movements, as in the near secession of Quebec from Canada in 1995 and the emergence of the Lega Nord party in Italy in the early 1990s. Lega Nord (the Northern

League) is a federalist political party, whose supporters in northern Lombardy and rural northeastern Italy want to distance themselves from what they view as a distinctively different culture and society in the Italian South.

### *Geography Matters: Mobilization Against Globalization*

All in all, the reality is that globalization influences—and is influenced by—specific cultures and settings in very different ways. In the process, places and regions are modified, rather than being destroyed or homogenized.

## **THE GLOBAL CONTEXT: SOME IMPORTANT PATTERNS**

Beyond the very broad context that is provided by the concept of a global economy that is leading to an increasing degree of spatial interdependence, it is important to recognize the underlying *diversity* of the world. In this section, we examine several key elements of regional diversity: religion, language, population distribution, urbanization, economic development, and social well-being. In Chapter 2, we describe the ways in which the human and environmental diversity of the world have unfolded, emphasizing the legacies of dependence and interdependence among world regions.

### **Religion**

Although religious affiliation is on the decline in some parts of the world's more affluent regions, it still acts as a powerful shaper of daily life in much of the world, influencing everything from eating habits and dress codes to coming-of-age rituals and death ceremonies. Religious beliefs and practices change as new interpretations are advanced or new spiritual influences are adopted. From the onset of globalization in the fifteenth century, religious missionizing—propagandizing and persuasion—has been a key element. In the 500 years since the onset of the Columbian Exchange, conversion of all sorts has escalated throughout the globe. The **Columbian Exchange** refers to the interdependence between the Old World and the New World, originating with the voyages of Columbus. In fact, since 1492, traditional religions have become dramatically dislocated from their sites of origin.

The processes of global political and economic change that led to the massive movement of the world's populations over the last five centuries has also meant the dislodging and spread of the world's many religions from their traditional sites of practice. Religious practices have

become so spatially mixed that it is a challenge to present a map of the contemporary global distribution of religion that reveals more than it obscures. This is because the global scale is too gross a level of resolution to portray the wide variation that exists among and within religious practices. **Figure 1.37** identifies the contemporary distribution of what are considered by religious scholars to be the world’s “major religions” because they contain the largest number of practitioners globally. As with other global-scale representations, the map is useful in that it helps to present a generalized picture. **Figure 1.38** identifies the source areas of four of the world’s major religions and their diffusion from those sites over time. The map illustrates the fact that the world’s major religions originated and diffused from two fairly small areas of the globe. The first, where Hinduism and Buddhism (as well as Sikhism) originated, is an area of the lowlands of the subcontinent of India drained by the Indus (Punjab on the map) and Ganga Rivers. The second, where Christianity and Islam (as well as Judaism) originated, is in the deserts of the Middle East.

Fig 1.37 map of world religions

Fig 1.38 map of spread of world religions

## Language

The distribution and diffusion of languages tells much about changing geographies and the impact of globalization on culture. **Figure 1.39** shows the distribution of the world’s indigenous language families. The geography of language has been significantly affected by globalization. The plethora of languages and dialects in many regions has made communication and commerce among the different language speakers difficult. These problems often lead governments to impose standard languages (also known as official languages because they are maintained by offices of government such as education and the courts).

Where official languages are put into place, indigenous languages may eventually be lost. Yet the actual unfolding of globalizing forces—like official languages—works differently in different places and in different times. The overall trend appears to be toward the loss of indigenous language (and other forms of culture). It is also important to recognize, however, that language and other forms of cultural identity can also be used as a means of challenging the political, economic, cultural, and social forces of globalization as they occur in France, Spain (the Basque Separatist Movement—see Chapter 3, p. 000), Canada (the Quebecois Movement—see Chapter 7, p. 000), and other countries.

Fig 1.39 map of world language families

## Population

As the world population density map demonstrates (**Figure 1.40**), some areas of the world are very heavily inhabited, while others only sparsely. Almost all of the world's inhabitants live on 10 percent of the land. Most live near the edges of land masses, near the oceans, seas, or along rivers with easy access to a navigable waterway. Approximately 90 percent live north of the equator, where the largest proportion of the total land area (63 percent) is located. Finally, most of the world's population live in temperate, low-lying areas with fertile soils. In mid-2000 the world contained just over 6 billion people. The United Nations Population Fund projects that the world's population will increase by 90 million per year to mid-century. This means that by the year 2050, the world is projected to contain nearly 10 billion. Compare this figure to the fact that over the course of the entire nineteenth century less than a billion people were added to the population. The geography of this projected population growth is noteworthy. Over the next century, population growth is predicted to occur almost exclusively in Africa, Asia, and Latin America, while Europe and North America will experience very low and in some cases zero population growth.

**Fig 1.40** map of world population density

The history of demographic change in industrialized countries has prompted some analysts to suggest that many of the economic, political, social, and technological transformations associated with industrialization and urbanization lead to a demographic transition. The **demographic transition** is a model of population change when high birth and death rates are replaced by low birth and death rates. Once a society has moved from a preindustrial economic base to an industrial one, population growth slows. According to the demographic transition model, the slowing of population growth is attributable to improved economic production and higher standards of living brought about by changes in medicine, education, and sanitation.

As **Figure 1.41** illustrates, the high birth and death rates of the preindustrial phase (Phase 1) are replaced by the low birth and death rates of the industrial phase (Phase 4) only after passing through the critical transitional phase (Phase 2) and then more moderate rates (Phase 3) of natural increase and growth. This transitional phase of rapid growth is the direct result of early and steep declines in mortality while fertility remains at high, pre-industrial levels.

**Fig 1.41** Demographic transition

The model suggests that it is inevitable that countries will be stalled for a while in the transitional high-growth phase, which has been called a

“demographic trap.” The reasoning for this is that, while new and more effective methods for fighting infectious diseases have been advanced, social attitudes about the desirability of large families have only recently begun to be affected. It should be emphasized, though, that the demographic transition model is based on the actual experience of developed countries and is thought by many experts to be less useful in explaining the demographic trends affecting less-developed countries and regions, whose entire development experience, as we shall see in Chapter 2, is quite different from that of industrialized countries.

Contemporary concerns about excessive population growth, especially in the world’s poorest countries, have led to the development of international and national policies and programs. Most of the international population policies of the last two decades have been directed at reducing the number of births worldwide through family-planning programs—offering free contraceptives and family-planning counseling; authorizing the minimum age of marriage; offering incentives to couples who have only one child; and mandating disincentives to couples who have larger families. It is now broadly recognized that the history, social and cultural practices, development level and goals, and political structures for countries and even regions within countries are highly variable and that one rigid and overarching policy to limit fertility will not work for all.

It is also now widely accepted among policymakers that a close relationship exists between women’s status and fertility. Women who have access to education and employment tend to have fewer children since they have less of a need for the economic security and social recognition that children are thought to provide. In Botswana, for instance, women with no formal education have, on average, 5.9 children, while those with four to six years of school have just 3.1 children. In Senegal, women with no education give birth to an average of seven children. In contrast, the average number of children born to a woman with 10 years of education drops to 3.6. The numbers are comparable for Asia and South America. Success at damping population growth in less-developed countries appears to be very much tied to enhancing the possibility for a good quality of life and to empowering people, especially women, to make informed choices.

### **Urbanization**

In 1950, only 29.7 percent of the world’s population was urbanized. In that year there were only 83 metropolitan areas of a million or more, and only 8 of five million or more existed. In 2000 there were

approximately 372 metropolitan areas of a million or more people and 45 with over 5 million. Cities now account for almost half the world's population. Much of the developed world has become almost completely urbanized (**Figure 1.42**), while in many less-developed regions the current *rate* of urbanization is without precedent (**Figure 1.43**). North America is the most urbanized continent in the world, with over 77 percent of its population living in urban areas. In contrast, Africa and Asia are less than 40 percent urban. Urbanization on this scale is a remarkable geographical phenomenon—one of the most important sets of processes shaping the world's landscapes.

Fig 1.42 about here (map: % urban, by country)

Fig 1.43 about here (map: urban growth, by country)

The single most important aspect of world urbanization, from a geographical perspective, is the striking difference in trends and projections between affluent and less-affluent countries. In 1950, two-thirds of the world's urban population was concentrated in the more affluent countries of Europe and North America. Since then, the world's urban population has increased threefold, the bulk of the growth having taken place in the less developed countries of other world regions. Asia provides some of the most dramatic examples of this trend. From a region of villages, Asia is fast becoming a region of cities and towns. Between 1950 and 1985, for example, its urban population rose nearly fourfold to 480 million people. By 2020, about two-thirds of Asia's population will be living in urban areas.

The reasons for this urban growth vary. Wars in Liberia and Sierra Leone have pushed hundreds of thousands of people into their capitals, Monrovia and Freetown. In Mauritania, Niger, and other countries bordering the Sahara, deforestation and overgrazing have allowed the desert to expand and swallow up villages, forcing people toward cities.

For the most part, though, urban growth in less-developed countries is a consequence of the onset of the demographic transition, which has produced fast-growing rural populations in regions that face increasing problems of agricultural development. As a response, many people in these regions migrate to urban areas seeking a better life.

In many countries, a single city dominates economic affairs to such an extent that their population is several times larger than the next-largest city. Geographers call this condition **primacy**. In Argentina, for example, Buenos Aires is more than 10 times the size of Rosario, the second-largest city. In the United Kingdom, London is more than 9

times the size of Birmingham, the second-largest city. In France, Paris is more than 8 times the size of Marseilles, France's second-largest city. In Brazil, both Rio de Janeiro and São Paulo are 5 times the size of Belo Horizonte, the third-largest city. Primacy is a result of the roles played by particular cities within their own national urban systems. Primacy in less-developed countries is usually a consequence of primate cities' early roles as gateway cities. In more developed countries it is usually a consequence of primate cities' roles as imperial capitals and centers of administration, politics, and trade for a much wider urban system than their own domestic system.

Ever since the sixteenth century, certain cities known as **world cities** (sometimes referred to as "global cities") have played key roles in organizing space beyond their own national boundaries. Initially, these roles involved the organization of trade and the execution of colonial, imperial, and geopolitical strategies. The world-cities of the seventeenth century were London, Amsterdam, Antwerp, Genoa, Lisbon, and Venice. In the eighteenth century, Paris, Rome, and Vienna also became world cities, while Antwerp and Genoa became less influential. In the nineteenth century, Berlin, Chicago, Manchester, New York, and St. Petersburg became world cities, while Venice became less influential. Today, with the globalization of the economy, the key roles of world cities are concerned less with the deployment of imperial power and the orchestration of trade and more with transnational corporate organization, international banking and finance, supranational government, and the work of international agencies. World cities have become the control centers for the flows of information, cultural products, and finance that collectively sustain the economic and cultural globalization of the world. World cities also provide an interface between the global and the local. They contain the economic, cultural, and institutional apparatus that channels national and provincial resources into the global economy and that transmits the impulses of globalization back to national and provincial centers.

Today, the global urban system is dominated by three world cities whose influence is truly global: London, New York, and Tokyo. The second tier of the system consists of world cities with influence over large regions of the world economic system. These include, for example, Brussels, Frankfurt, Los Angeles, Paris, Singapore, and Zürich. A third tier consists of important international cities with more limited or more specialized international functions (including Amsterdam, Madrid, Miami, Mexico City, Seoul, and Sydney). A fourth tier exists of cities of national importance and with some transnational functions

(including Barcelona, Dallas, Manchester, Munich, Melbourne, and Philadelphia).

### **Economic Development and Social Well-Being**

Patterns of economic development are the result of many different factors. One of the most important is the availability of key resources such as cultivable land, energy sources, and valuable minerals. Key resources are unevenly distributed across the world. Just as important, the *combinations* of energy and minerals that are crucial to economic development are especially uneven in their distribution (**Figure 1.44**). A lack of natural resources can, of course, be remedied through international trade (Japan's success is a prime example of this); but for most countries the resource base remains an important determinant of development.

#### **Figure 1.44 -- World resources map**

A high proportion of the world's key industrial resources—basic raw materials and sources of energy—are concentrated in Russia, the United States, Canada, South Africa, and Australia. The biggest single exception to the concentration of key resources in these countries is presented by the vast oilfields of the Middle East. It is an exception that has enabled formerly less-developed countries like Saudi Arabia to become wealthy, and that has made the region especially important in international politics.

The concentration of known resources in just a few countries is largely a result of geology, but it is also partly a function of countries' political and economic development. Political instability in much of post-colonial Africa, Asia, and Latin America has seriously hindered the exploration and exploitation of resources. In contrast, the relative affluence and strong political stability of the United States has led to a much more intensive exploration of resources. We should bear in mind, therefore, that Figure 1.44 reflects only the currently *known* resource base.

We should also bear in mind that the significance of particular resources is often tied to particular technologies. As technologies change, so resource requirements change, and the geography of economic development is "rewritten." One important example of this was the switch in industrial energy sources from coal to oil, gas, and electricity early in the twentieth century. When this happened, coalfield areas like central Appalachia found their prospects for economic

development on indefinite hold, while oilfield areas like west Texas suddenly had potential. Another example was the switch in the manufacture of mass-produced textiles from natural fibers like wool and cotton to synthetic fibers in the 1950s and 1960s. When this happened, many farmers in the American South, for example, had to switch from cotton to other crops. Regions and countries that are heavily dependent on one particular resource are vulnerable to the consequences of technological change. They are also vulnerable to fluctuations in the price set for their product on the world market. These vulnerabilities are particularly important for countries such as Bolivia, Chile, Guyana, Liberia, Mauritania, Sierra Leone, Surinam, and Zambia, whose economies are especially dependent on nonfuel minerals.

### Resources and Technology

Technological innovations in power and energy, transportation, and manufacturing processes have been important catalysts for changes in the pattern of economic development. They have allowed a succession of expansions of economic activity in time and space; as a result, many existing industrial regions have grown bigger and more productive. Industrial development has also spread to new regions, whose growth has become interdependent with the fortunes of others through a complex web of production and trade. Each major cluster of technological innovations tends to create new requirements in terms of natural resources as well as labor forces and markets. The result is that each major cluster of technological innovations—called technology systems—has tended to favor different regions, and different kinds of places. **Technology systems** are clusters of interrelated energy technologies, transportation technologies, and production technologies that dominate economic activity for several decades at a time, until a new cluster of improved technologies evolves. What is especially remarkable about these technology systems is that they have come along at about 50-year intervals. Since the beginning of the Industrial Revolution, we can identify four of them:

1790-1840: early mechanization based on water-power and steam engines, the development of cotton textiles and ironworking, and the development of river transport systems, canals, and turnpike roads.

1840-1890: the exploitation of coal-powered steam engines, steel products, railroads, world shipping, and machine tools.

1890-1950: the exploitation of the internal combustion engine, oil and plastics, electrical and heavy engineering, aircraft, radio and telecommunications.

1950-: the exploitation of nuclear power, aerospace industries, and electronics and petrochemicals; and the development of limited-access highways and global air routes.

A fifth technology system, still incomplete, began to take shape in the 1980s with a series of innovations that are now being commercially exploited:

1990-: the exploitation of solar energy, robotics, microelectronics, biotechnology, advanced materials (fine chemicals, thermoplastics, for example), and information technology (digital telecommunications and geographic information systems, for example).

Each of these technology systems has rewritten the geography of development as it has shifted the balance of advantages between regions. The contemporary economic structure of a country or region is often described in terms of the relative share of primary, secondary, tertiary, and quaternary economic activities. **Primary activities** are those that are concerned directly with natural resources of any kind. They include agriculture, mining, fishing, and forestry. **Secondary activities** are those concerned with manufacturing or processing. They involve the processing, transforming, fabricating, or assembling the raw materials derived from primary activities, or the reassembling, refinishing, or packaging of manufactured goods and include, for example, steel making, food processing, furniture making, textile manufacturing, and garment manufacturing. **Tertiary activities** are those that involve the sale and exchange of goods and services. They include warehousing, retail stores, personal services such as hairdressers, commercial services such as accounting and advertising, and entertainment. **Quaternary activities** are those that deal with handling and processing knowledge and information. Examples include data processing, information retrieval, education, and research and development (R & D).

The economic structure of much of the world is dominated by the primary sector (that is, primary activities such as agriculture, mining, fishing, and forestry). In much of Africa and Asia, between 50 and 75 percent of the labor force is engaged in primary-sector activities. In contrast, the primary sector of the world's affluent countries is typically small, occupying only 5 or 10 percent of the labor force. The secondary sector is much larger in the developed countries, where the world's specialized manufacturing regions are located. The tertiary and quaternary sectors are significant only in the most affluent countries. In the United States, for example, the primary sector in 1999 accounted for

less than 4 percent of the labor force, the secondary sector for about 22 percent, the tertiary sector for just over 50 percent, and the quaternary sector for 24 percent of the labor force.

### Measuring Economic Development

Understanding the structure of the world's economies, however, tells us only part of the story of their level of development. At the global scale, levels of economic development are usually measured by economic indicators such as gross domestic product and gross national product. **Gross domestic product** (GDP) is an estimate of the total value of all materials, foodstuffs, goods, and services that are produced by a country in a particular year. To standardize for countries' varying sizes, the statistic is normally divided by total population, which gives an indicator, *per capita* GDP, that provides a good yardstick of relative levels of economic development. **Gross national product** (GNP) includes the value of income from abroad—flows of profits or losses from overseas investments, for example. In making international comparisons, GDP and GNP can be problematic because they are based on each nation's currency. Recently, it has become possible to compare national currencies based on *purchasing power parity* (PPP). In effect, PPP measures how much of a common "market basket" of goods and services each currency can purchase locally, including goods and services that are not traded internationally. Using PPP-based currency values to compare levels of economic prosperity usually produces lower GNP figures in wealthy countries and higher GNP figures in poorer countries, compared with market-based exchange rates. Nevertheless, even with this compression between rich and poor, economic prosperity is very unevenly distributed across countries.

As **Figure 1.45** shows, most of the highest levels of economic development are to be found in northern latitudes (very roughly, north of 30°N), which has given rise to another popular shorthand for the world's economic geography: the division between the "North" and the "South". In almost all of the more developed countries of North America, northwestern Europe, and Japan, annual per capita GNP (in PPP) in 1997 exceeded \$20,000. The only other countries that matched these levels were Australia and Singapore, where annual per capita GNP in 1997 was \$20,170 and \$29,000, respectively.

**Figure 1.45** (map of world per capita GNP)

In the rest of the world annual per capita GNP (in PPP) typically ranges between \$1,000 and \$7,000. The gap between the highest per capita GNPs (\$29,000 in Singapore, \$28,740 in the United States, and \$26,320,

in Switzerland) and the lowest (\$510 in Ethiopia and Sierra Leone, \$520 in Namibia) is huge. The gap between the world's rich and poor is also getting wider rather than narrower. In 1970, the average GDP per capita of the 10 poorest countries in the world was just one-fiftieth of the average GDP per capita of the 10 most prosperous countries. By 1990, the relative gap had doubled, and by 1999, the average of the bottom 10 was approaching one two-hundredth of the average of the top 10.

#### Patterns of Social Well-being

This inequality is reflected—and reinforced—by many aspects of human well-being. Patterns of infant mortality, a reliable indicator of social well-being, show the same steep North-South gradient. For adults in the industrial countries, life expectancy is high and continues to increase. Life expectancy at birth in Australia in 1995 was 78.2 years, in Canada it was 79.1, and in the United States it was 76.4. In contrast, life expectancy in the poorest countries is dramatically shorter. In Namibia in 1995 life expectancy at birth was 55.8 years; in Ethiopia it was 48.7, and in Sierra Leone it was 34.7. In most African countries, only 60 to 75 percent of the population can expect to survive to age 40.

The United Nations Development Programme (UNDP) has devised an overall index of human development, based on measures of life expectancy, educational attainment, and personal income. The index is calculated in such a way that a country that had the best scores among all of the countries in the world on all three indicators would have a perfect index score of 1.0, while a country that ranked worst in the world on all three indicators would have an index score of zero. **Figure 1.46** shows the international map of human development in 1997. Canada, Norway, and the United States had the highest overall levels of human development (0.93), while Ethiopia (0.30), Niger (0.30) and Sierra Leone (0.25) had the lowest levels. The same fundamental pattern is repeated in terms of the entire array of indicators of human development: adult literacy, poverty, malnutrition, access to physicians, public expenditure on higher education, telephone lines, Internet users, and so on. Inequality on this scale poses the most pressing, as well as the most intractable questions of national and international policymaking. It also raises important questions of **spatial justice**—the fairness of geographical variations in people's levels of affluence and well-being, given people's needs and their contributions to the production of wealth and social well-being.

**Figure 1.46** (map: human development index)

These questions are underscored by some simple comparisons between the needs of people in less-developed countries and the spending patterns of those in the world's most affluent countries. The UNDP has calculated that the annual cost of providing a basic education for all children in less-developed countries would be in the region of \$6 billion, which is less than the annual sales of cosmetics in the United States. Providing water and sanitation for everyone in less-developed countries is estimated at \$9 billion per year, which is less than Europeans' annual expenditure on ice cream. Providing for basic health and nutrition for everyone in the less-developed countries would cost an estimated \$13 billion per year, which is less than the annual expenditure on pet foods in Europe and the United States. Reducing the military expenditures of affluent countries (in the region of \$500 billion per year) by less than 10 percent each year would pay for the costs of basic education, water and sanitation, basic health and nutrition, and reproductive health programs for everyone in less-developed countries.

#### Development and Gender Equality.

North-South patterns are also reflected in indicators that measure economic development in terms of *gender equality*. The UNDP has established a gender-sensitive development index that adjusts the overall human development index for gender inequality in life expectancy, educational attainment, and income. According to this index, in no country are women better off than men. Perhaps most revealing is the UNDP's Gender Empowerment Index, which is based on measures of women's incomes, their participation in the labor force as administrators and managers, professional and technical workers, and the percentage of parliamentary seats held by women. As in the overall index of human development, a country with a perfect score (ranked the best in the world on all measures) would score 1.0, with zero representing the worst possible score (ranked worst on all measures). **Figure 1.47** shows the actual index values for 1997. The top three countries were Scandinavian: Norway (0.81), Sweden (0.78), and Denmark (0.77). The countries with the worst index score were Niger (0.12), Pakistan (0.17) and Togo (0.19). Only 33 of the 103 countries in the study were able to record a Gender Empowerment Index of more than 0.50. Nevertheless, as Figure 1.47 demonstrates, high levels of economic development are not a prerequisite for creating economic opportunities for women. Costa Rica and Trinidad and Tobago scored better than France and Italy, and the Bahamas scored better than Portugal.

**Figure 1.47** (map: gender empowerment index)

Women are, in fact, playing a central and increasing role in processes of development and change in the global economy. In many less-developed countries, women constitute the majority of workers in the manufacturing sector created by the new international division of labor.

In others, it is women who keep households afloat in a world economy that has resulted in localized recession and intensified poverty. On average, women earn 30 to 40 percent less than men for the same work.

They also tend to work longer hours than men: 12 to 13 hours a week more (counting both paid and unpaid work) in Africa and Asia.

Globalization appears to lead to increasing levels of participation by women in the formal labor force. Large firms producing for export tend to employ women in assembly-line jobs because they can be hired for lower wages than men. But increasing participation does not always mean less discrimination. Women constitute a large share of workers in informal subcontracting--often in the garment industry--at low wages and under poor conditions. Globalization is also associated with increasing levels of home work, tele-work and part-time work. In the United Kingdom, the share of workers in such positions rose from 17 percent in 1965 to 40 percent in 1991. Similar changes have taken place in many other countries, and in most of them women constitute 70 or 80 percent of home-, tele-, and part-time workers. This is a mixed blessing. Informal work arrangements can accommodate women's care obligations in the family, but such jobs are typically precarious and underpaid.

## **CONCLUSION: A WORLD OF REGIONS**

Regional geography combines elements of both physical and human geography and is concerned with the way that unique combinations of environmental and human factors produce territories with distinctive landscapes and cultural attributes. What is distinctive about the study of regional geography is not so much the phenomena that are studied as the way they are approached. The study of regional geography draws on several fundamental concepts. Understanding maps and concepts of location, spatial interdependence, sense of place, and landscape allows geographers to analyze the spatial patterns and distributions that underpin regional differentiation and regional change.

Geography matters because it is in specific places that people learn who and what they are, and how they should think and behave. Places are also a strong influence, for better or worse, on people's physical well-

being, their opportunities, and their lifestyle choices. Places also contribute to peoples' collective memory and become powerful emotional and cultural symbols. Places are the sites of innovation and change, of resistance and conflict.

We must, however, be able to frame our investigations of specific places within the compass of the entire globe. This is important for two reasons. First, the world consists of a complex mosaic of places and regions that are interrelated and interdependent in many ways. Second, place-making forces—especially economic, cultural, and political forces that influence the distribution of human activities and the character of places and regions—are increasingly operating at global and international scales. The interdependence of regions means that individual places are tied in to wider processes of change that are reflected in broader geographical patterns. An important issue for regional geographers is to recognize these wider processes and broad geographical patterns without losing sight of the individuality and uniqueness of specific places and regions.

While the regional approach provides a rich and intuitively appealing way of organizing knowledge about the world, there are, as we have noted, various methods of regional analysis, and different ways of identifying and defining regions. In this book, we emphasize the interdependence of regions, explaining and analyzing them as the outcomes, in different physical environments, of successive eras of human activity that have been organized on the basis of different economic, cultural and political systems, and successive phases of economic and technological development.

In the next chapter, we describe the evolution of this world of interdependent regions, emphasizing the broad divisions of global space in terms of physical environments and in terms of the functional organization of economic and political regions into core, periphery, and semiperiphery. These broad divisions provide the "big picture"—an essential context for understanding the nature and evolution of specific places and regions. Subsequent chapters are organized in terms of major world regions. Within each of these chapters, we describe the region's changing roles in the context of globalization and explore the consequences of these changes for internal regional differentiation and interdependence. Against this background, we examine systematically the core sub-regions, key cities, and distinctive representative landscapes of the region.

## KEY TERMS

azimuthal projection (p. 00)  
cartography (p. 00)  
cartogram (p. 00)  
cognitive image (p. 00)  
colonialism (p. 00)  
Columbian Exchange (p. 000)  
conformal projection (p. 00)  
cultural ecology (p. 00)  
demographic transition (p. 00)  
economies of scale (p. 00)  
environmental determinism (p. 00)  
equal area (equivalent) projection (p. 00)  
equidistant projection (p. 00)  
fast world (p. 00)  
formal region (p. 00)  
functional region (p. 00)  
geographic information systems (p. 00)  
Global Positioning System (p. 00)  
globalization (p. 00)  
Gross domestic product (GDP) (p. 00)  
Gross national product (GNP) (p. 00)  
imperialism (p. 00)  
irredentism (p. 00)  
language family (p. 00)  
language group (p. 00)  
latitude (p. 00)  
longitude (p. 00)  
ordinary landscapes (p. 00)  
place (p. 00)  
primacy (p. 00)  
primary activity (p. 00)  
quaternary activity (p. 00)  
region (p. 00)  
regional geography (p. 00)  
regionalism (p. 00)  
remote sensing (p. 00)  
secondary activity (p. 00)  
sectionalism (p. 00)  
semiperipheral region (p. 00)  
sense of place (p. 00)  
site (p. 00)

situation (p. 00)  
slow world (p. 00)  
sovereignty (p. 00)  
spatial diffusion (p. 00)  
spatial justice (p. 00)  
state (p. 00)  
supranational organization (p. 00)  
sustainable development (p. 00)  
symbolic landscape (p. 00)  
technology system (p. 00)  
territory (p. 00)  
tertiary activity (p. 00)  
time-space convergence (p. 00)  
vizualization (p. 00)  
world city (p. 00)  
world regions (p. 00)

## EXERCISES

At the end of each chapter, you will find exercises and activities based on using the Internet, along with some that do not require access to the Internet. This book has its own “home page” on the Internet, where you will find additional resources—maps, photographs, data—as well as exercises and activities that relate to each chapter. You will also find an evaluation checksheet and suggestion form that you can mail to the authors electronically.

## FURTHER READING

- Agnew, J., Livingstone, D. N., and Rogers, A. Human Geography: An Essential Anthology. Oxford: Blackwell, 1996.
- Claval, P. An Introduction to Regional Geography. Oxford: Blackwell, 1998.
- Dickinson, R. E. The Regional Concept. London: Routledge & Kegan Paul, 1976.
- Entrikin, N. The Betweenness of Place. Baltimore: Johns Hopkins University Press, 1991.
- Gilbert, A. The new regional geography in English- and French-speaking countries, Progress in Human Geography, 12, 1988, 208-28.
- Gregory, D. Geographical Imaginations. Oxford: Blackwell, 1994.
- Haggett, P. The Geographer's Art. Oxford: Blackwell, 1990.
- Harvey, D. Explanation in Geography. London: Edward Arnold, 1969.

- Knox, P. L. and Marston, S. A. Human Geography: Places and Regions in Global Context, 2<sup>nd</sup> edition. Upper Saddle River, NJ: Prentice Hall, 2001.
- Pudup, M. B. Arguments within regional geography, Progress in Human Geography, 12, 1988, 369-90.
- Rogers, A. Viles, H., and Goudie, A. (Eds.) The Student's Companion to Geography. Cambridge, MA: Blackwell, 1992.
- Tuan, Y-F. Space and place: a humanistic perspective, Progress in Human Geography, 6, 1974, 211-52.